The STANLEY TOOL GUIDE

Price 25c

THE TOOL BOX OF AMERICA

STANLEY

How To Select and Use Boring Tools.

HOW TO USE BORING TOOLS

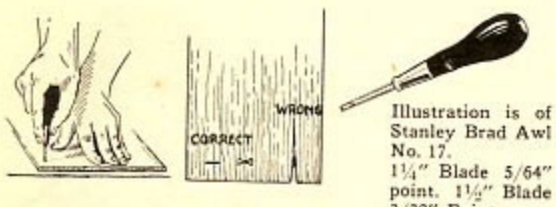
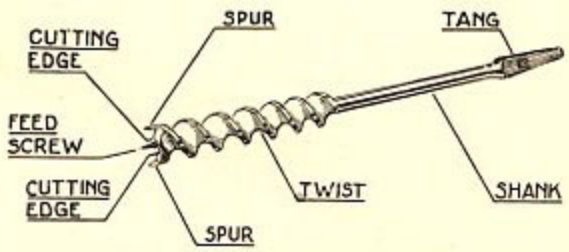


Illustration is of Stanley Brad Awl No. 17. 1¼" Blade 5/64" point. 1½" Blade 3/32" Point.

Brad Awls are used to make holes for small screws and nails. To avoid splitting the wood, start the awl with its edge across the grain, turning it back and forth slightly as you press down. Do not let the edge come parallel with the grain.

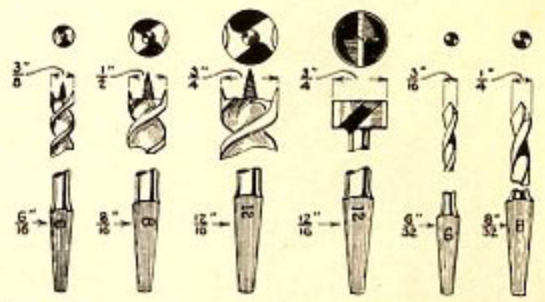


THE AUGER BIT

Auger Bits are sized by 16ths of an inch, measuring the diameter.

Bits vary in length from 7" to 10".

Dowel Bits are short Auger Bits about 5½" long.



Auger Bits 16ths of an inch. Fostner Bits, 16ths. Twist Bits, 32nd of an inch.

Bits are marked for size by a single number. The numerator of the fraction stands for the diameter of the bit. Auger and Fostner Bits are marked by 16ths of an inch. No. 8 stands for 8/16" or ½". Twist Bits for wood are usually marked in the same way, by 32nds of an inch. No. 8 stands for 8/32" or ¼".

Twist Bits for Wood are used to make holes for screws, nails or bolts. They are sized by 32nds of an inch and range from No. 2 = 1/16" and larger.

For boring directions, see Stanley Bit Brace Chart and Stanley Doweling Jig Chart.

For drilling directions, see Stanley Hand Drill Chart.

Bit Stock Drills are designed and tempered to make holes in metal, but may also be used in wood, especially in repair work where contact with nails or metal is possible. They are sized by 32nds of an inch and range from No. 2 = 1/16" and larger.

The standard double thread feed screw is best for general work with seasoned wood. It is preferred for cabinet and pattern making.

The single thread feed screw is best for fast cutting in green or gummy wood.

The diamond point is used for machine boring with power feed.

Fostner Bits are used to bore holes partway through where the auger bit screw or spur would go through the work, also on end grain, thin wood, or near an end where an auger bit would split the work. To center or start a Fostner Bit, scribe a circle the size of the hole with dividers and press the rim of the Fostner Bit into it. Fostner Bits are sized by 16ths of an inch from No. 4—¼" and larger.

Sharpen Auger Bits with a bit file. For a keen edge, also whet with a slipstone. Sharpen the spurs on the inside to preserve the diameter.

Sharpen the cutting edges on the top to maintain the clearance on the under side. The cutting edges must be kept even.

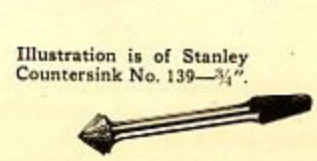


Illustration is of Stanley Countersink No. 139—¾". With Gauge No. 139G—¾".

Countersink Bits are used to widen screw holes so that the heads of flat-head screws may be flush, or slightly below, the surface of the work.

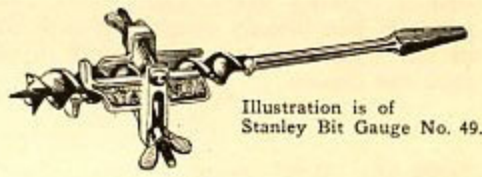
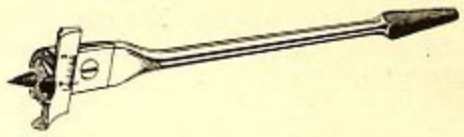


Illustration is of Stanley Bit Gauge No. 49.

An Adjustable Bit Gauge may be used to regulate the depth of holes.



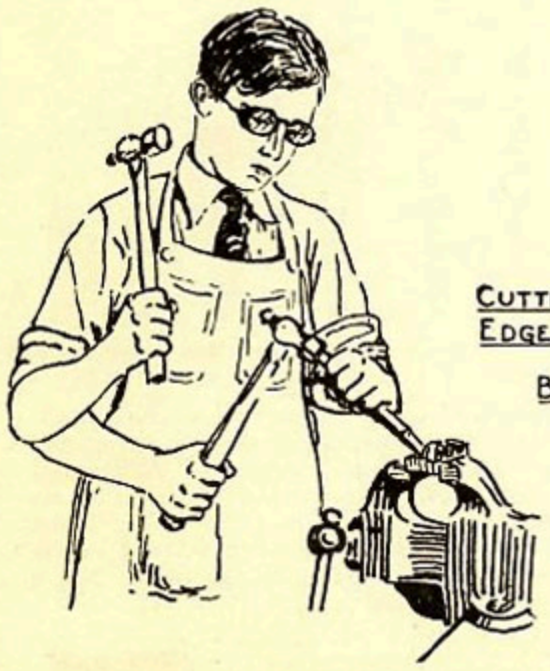
The Expansive Bit takes the place of many large bits. The cutter may be adjusted for various sized holes. When 2 on the cutter matches the index mark, the bit is set to bore a 2" hole. Moving the cutter 1/32" outward will increase the diameter of the hole 1/16". Test the size on a piece of waste wood. For boring through, clamp a piece of waste wood on the back of the work to prevent splitting.

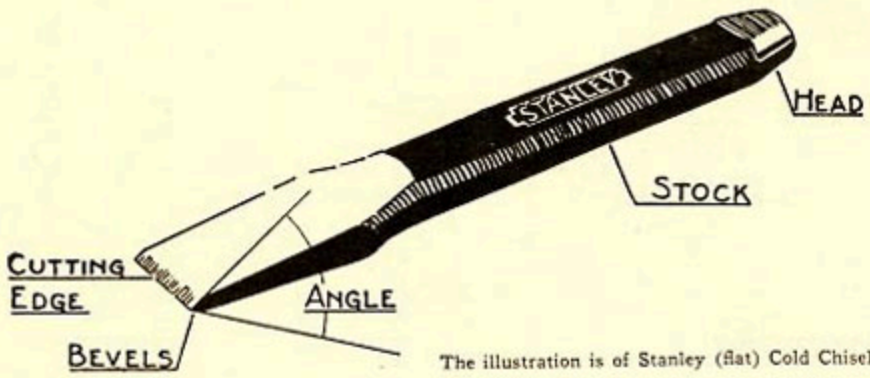
NOTE: TOOLS WITHOUT CATALOG NUMBERS ARE NOT MANUFACTURED BY STANLEY

How To Select and Use Boring Tools.

How To Use Cold Chisels.

HOW TO USE
THE STANLEY FLAT COLD CHISEL





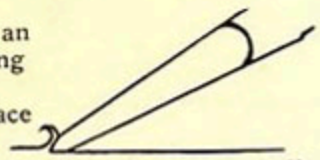
The illustration is of Stanley (flat) Cold Chisel No. 99-¾.

To chip a broad surface, that is, to remove the surplus material preparatory to smoothing with a file, use a cape and a flat chisel.

Chip grooves across the surface of the work with a cape chisel.

Then chip away the material between the grooves with a flat chisel.

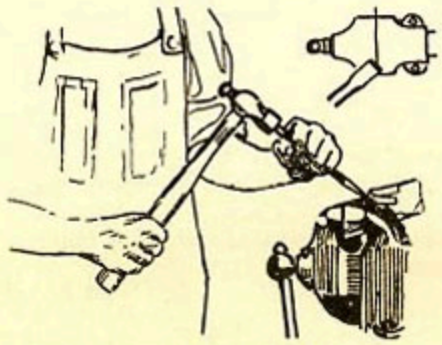
Hold the work in the vise at about elbow height. Grasp the chisel firmly enough to guide it, but loosely enough to ease the shock of the hammer blows imparted to the hand thru the chisel.



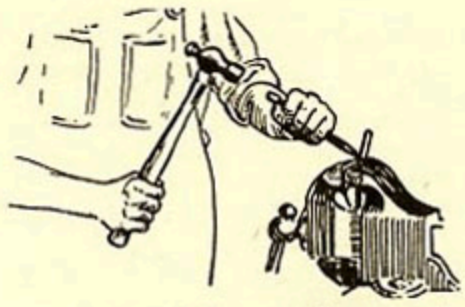
Hold the chisel at an angle that will bring the lower bevel parallel to the surface of the work.

Grasp the hammer near the end of the handle and swing it well over the shoulder in a free graceful sweep.

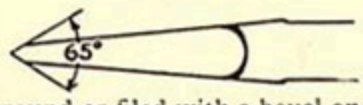
It is not necessary to lubricate the chisel when chipping cast iron. When chipping wrought iron or steel, lubricate the chisel every few blows by touching the edge to a piece of oil soaked waste.



To shear in a vise, hold the chisel so that when struck with the hammer, the chisel and the stationary jaw of the vise act like a pair of shears.



To cut rod or small bar stock to rough size, nick it on opposite sides and bend it until it breaks.



Cold chisels are ground or filed with a bevel on both sides, forming a cutting angle of about 65° for average work.

To cut out a hole, use a narrow chisel so the shape of the cut will conform closely to the line, reducing the amount of filing necessary for finishing.

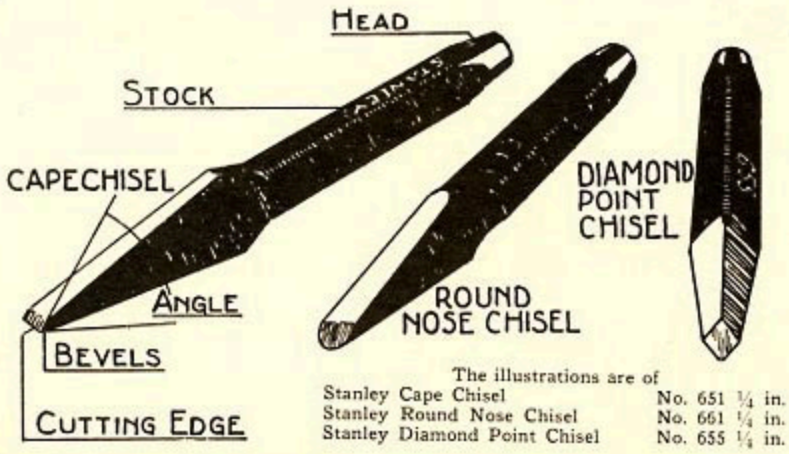
Cold chisels are usually made of carbon tool steel. Chisel No. 99 is made of Chrome Vanadium Alloy Steel, tough enough to give hard lasting use, but soft enough to file sharp; thus avoiding the danger of burning the edge when grinding.

TO AVOID ACCIDENTS

Keep the head of the chisel and the face of the hammer clean and free from oil. Let the grip of the thumb and forefinger be loose enough to give, if the hammer should slip and hit them. In use, the head of the chisel becomes turned over or burred. Keep the burr ground away, to prevent injury to the hands and to prevent particles of the burr from flying off into your eyes. Use goggles to protect your eyes when chipping.

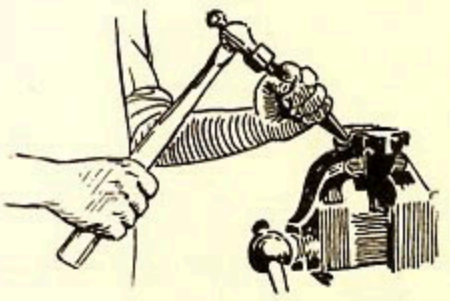
HOW TO USE
THE STANLEY COLD CHISELS

CAPE, ROUND NOSE, AND DIAMOND POINT



The illustrations are of

Stanley Cape Chisel	No. 651 ¼ in.
Stanley Round Nose Chisel	No. 661 ¼ in.
Stanley Diamond Point Chisel	No. 655 ¼ in.



To cut an oil groove in a bearing, use a round nose or a diamond point chisel.

To chip parallel grooves, preparatory to chipping the surface with a flat chisel, use a cape chisel.

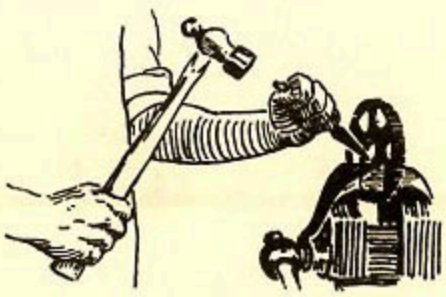
Space the grooves slightly closer together than the width of the flat chisel. Chip the stock from both sides toward the center, to avoid fracturing the metal at the edges.

Hold the work in the vise, at about elbow height.

Grasp the chisel firmly enough to guide it, but loosely enough to ease the shock of the hammer blows imparted to the hand thru the chisel.

Hold the cape chisel at an angle that will bring the lower bevel parallel to the surface of the work.

Grasp the hammer near the end of the handle and swing it well over the shoulder, with a free graceful sweep. It is not necessary to lubricate the chisel when chipping cast iron. When chipping wrought iron or steel, touch the cutting edge every few blows with a piece of oily cotton waste.



To cut a keyway, use a cape chisel; cut both ways toward the center, to avoid breaking out one end of the keyway.

To cut off large rivet heads or other projections, use a cape chisel. (a) Cut a groove thru the center. (b) Chip off the remaining parts.

TO AVOID ACCIDENTS

Keep the head of the chisel and the face of the hammer clean and free from oil. Let the grip of the thumb and forefinger be loose enough to give, if the hammer should slip and hit them. In use, the head of the chisel becomes turned over or burred. Keep the burr ground away to prevent injury to the hands and to prevent particles of the burr from flying off into your eyes. Use goggles to protect your eyes when chipping.

To draw a hole: If a drill in starting has run off the center of the layout "a", the error can be corrected if the spot is not too deep. Chip the heavy side of the spot with a round nose or a diamond point chisel, as shown at "b", The drill will bite deeper on this side, thus drawing the spot to the center, as shown at "c".

Cold chisels are ground to a cutting angle of about 65° for average work.

Cold chisels are usually made of carbon tool steel. No. 651, No. 655 and No. 661 are made of Chrome Vanadium Alloy Steel, tough enough to give hard lasting use, but soft enough to file sharp, thus avoiding the danger of burning the edge when grinding.

How To Select and Use Boring Tools.

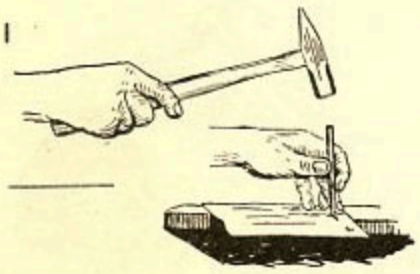
How To Use Cold Chisels.

How To Use Setting and Riveting Hammers.

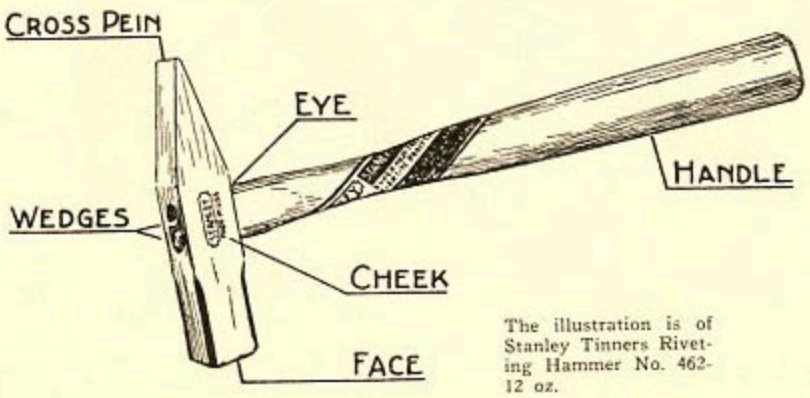
HOW TO USE

THE STANLEY RIVETING HAMMER

1

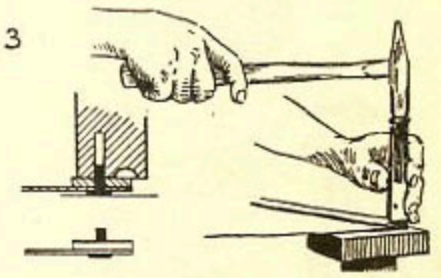


Lay off the positions of the holes by measurement or by template. Center punch them.



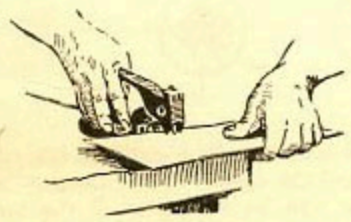
The illustration is of Stanley Tinners Riveting Hammer No. 462-12 oz.

3



Insert the rivets, let a portion, about 1½ times the diameter of the rivet, project for heading. Hold the work over a stake and draw the parts tightly together with the rivet set.

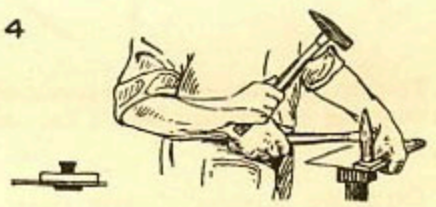
2



Punch or drill the holes by hand or by machine. To punch holes by hand, use a solid punch over a block of lead.

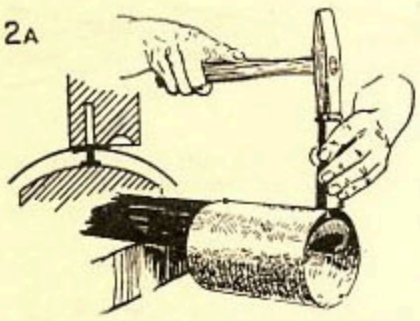
To overcome a tendency of the work to buckle, due to a slight stretching of the metal around the rivets, drive the rivets as shown by the numbers in the sketch. If a rivet bends, or is poorly headed, cut off the head, drive it out with a punch and try again.

4



Strike a few blows straight down on the rivet. Heavy blows, or too many blows, will stretch and buckle the metal around the rivet.

2A

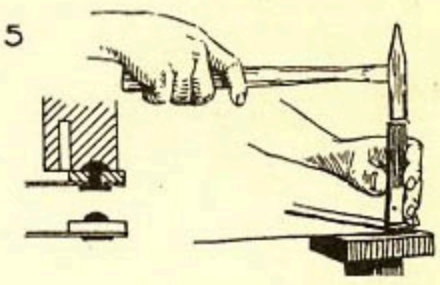


Frequently holes are punched by driving the rivet set down over the rivet.

The most common kinds of rivets are round head, flat head, and countersunk head rivets.

For countersunk rivets, the holes are countersunk. The rivets are driven down until the heads fill the holes and draw the parts of the work tightly together. The heads are filed off even with the surface of the work.

5



Finish heading the rivet with the cup like hollow in the rivet set.

TO AVOID ACCIDENTS

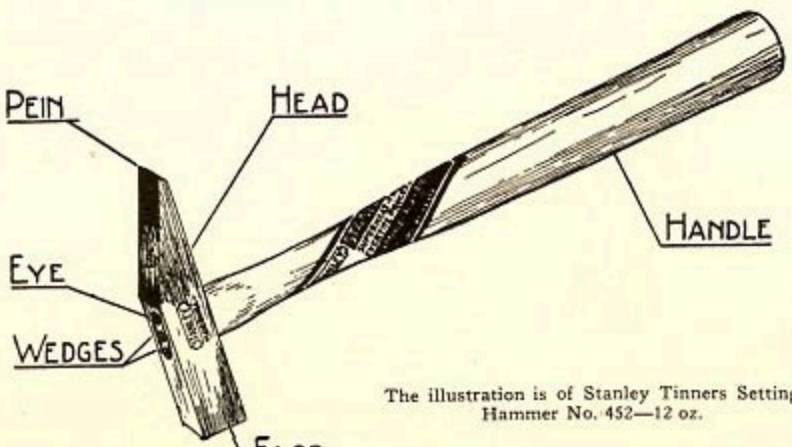
Inspect the hammer every time it is checked out of the tool room. Be sure the hammer head is firmly attached and the wedges driven tightly in place.

HOW TO USE

THE STANLEY SETTING HAMMER

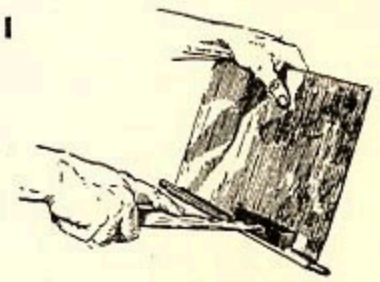
1

Dressing a lock edge on the edge of the bench with the side of the hammer. This operation is often done with a mallet or with a piece of wood.



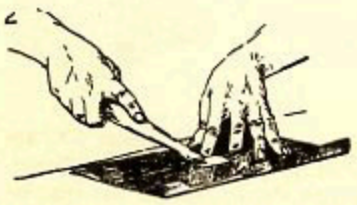
The illustration is of Stanley Tinners Setting Hammer No. 452—12 oz.

1

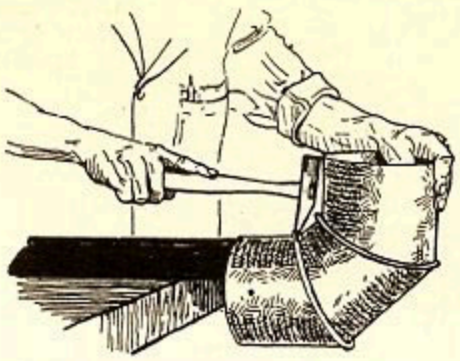


Dressing metal around a wire to make a reinforced wire edge.

2

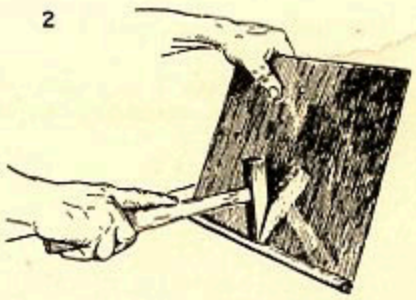


Dressing a bench made lock edge.



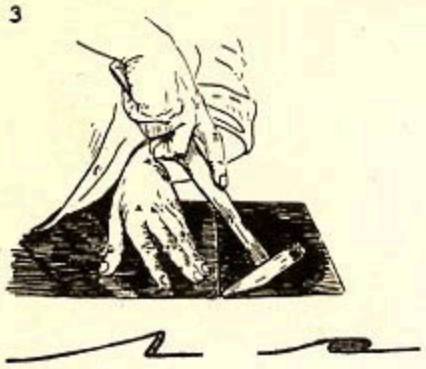
Closing the seams of an elbow.

2



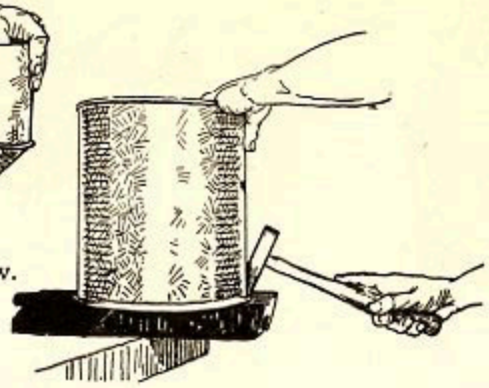
Peining the edge around a wire to finish a reinforced wire edge.

3

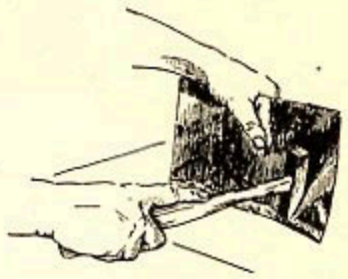


PEINED IN. CLOSED

Peining a lock edge with a setting hammer. Closing or dressing down a lock seam is done with a mallet.



Closing the seams of a double seamed bottom.



Opening a closed seam.

TO AVOID ACCIDENTS

Inspect the hammer every time it is checked out of the tool room. Be sure the hammer head is firmly attached and the wedges driven tightly in place.

How To Select and Use Boring Tools.

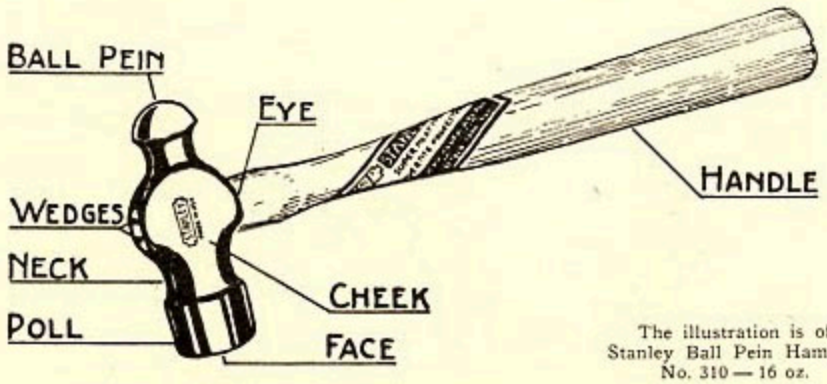
How To Use Cold Chisels.

How To Use Setting and Riveting Hammers.

How To Use Cross Pein, Straight Pein and Ball Pein Hammers.

HOW TO USE

THE STANLEY BALL PEIN HAMMER



The illustration is of Stanley Ball Pein Hammer No. 310 — 16 oz.

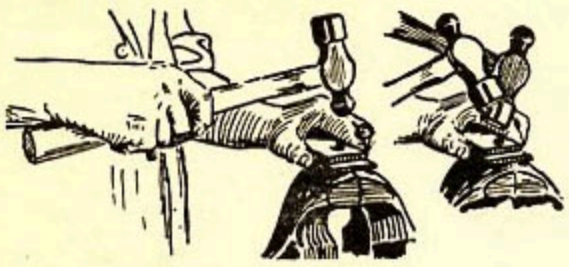
The ball pein hammer is the mechanic's all around hammer.

For chipping, use a ball pein hammer, 1 to 2 lbs. in weight, according to the workman's preference.

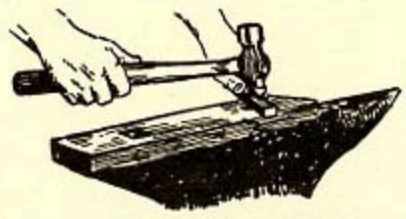
To strike heavy and medium blows, grasp the hammer firmly near the end of the handle and swing it with a free graceful sweep, well over the shoulder.

To strike light blows, as in driving rivets, grasp the handle nearer the head and swing with a motion slightly at the elbow but chiefly at the wrist.

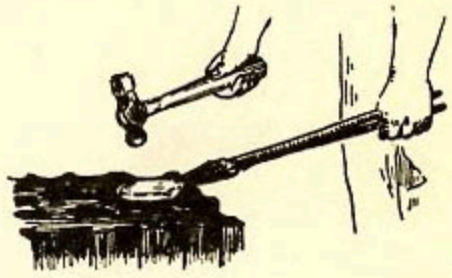
The ball pein hammer, weighing about 1½ to 2 lbs., is a good general purpose light weight hand hammer for forge work. Notice the blacksmith extends his thumb along the back of the handle.



To rivet with a ball pein hammer: Support the rivet on something hard, a stake or a dolly, etc.; draw the parts together with a rivet set or with a drift; strike straight down on the rivet with the ball pein; head the rivet over with the ball pein or with the face of the hammer.



To change a center punch mark, hammer out the old mark with the ball pein.



To raise a bowl shaped form, such as the bowl of a solder ladle, hold the work over a swage block or suitable form or stake and beat it out with the ball pein.

TO AVOID ACCIDENTS

Inspect the hammer every time it is checked out of the tool room. Be sure the head is firmly attached and the wedges driven tightly in place. Avoid striking the handle to save it from breakage.

Avoid chipping the edges of the hammer face, when striking hard metals.

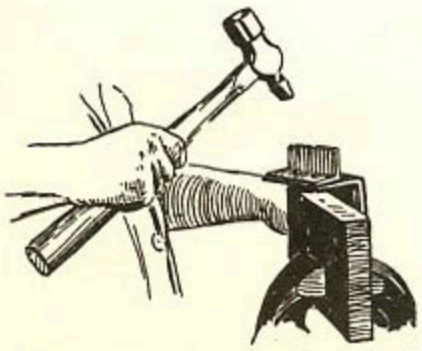
Avoid striking with the cheek of the hammer, as it is the weakest part.

How To Select and Use Hand Saws.
How To Use Wood Chisels.
How To Use Nail Hammers and Screw Drivers.
How To Use Hand Drills and Bit Braces.

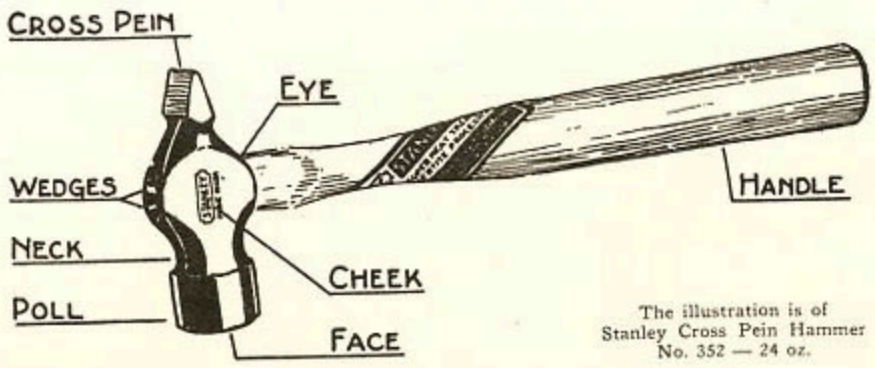
HOW TO USE

THE STANLEY HAMMERS

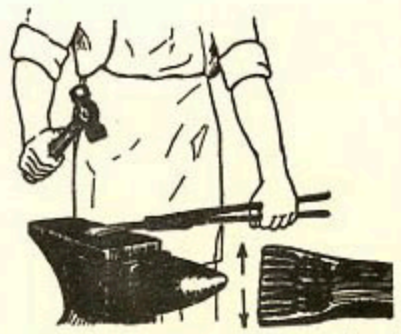
STRAIGHT AND CROSS PEIN



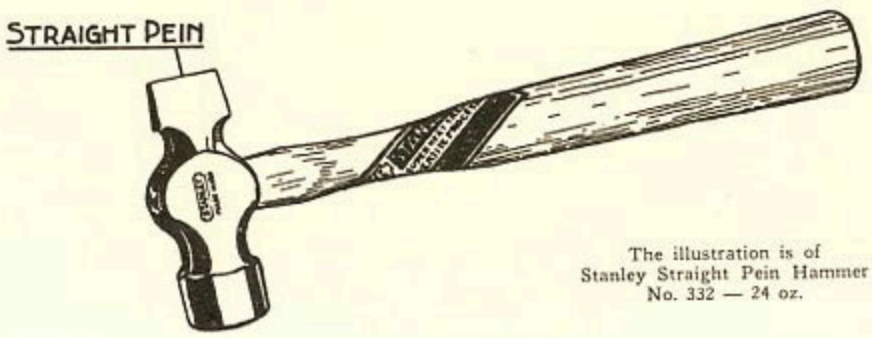
For many jobs of swaging, riveting, stretching or bending, a ball pein hammer is not suitable. Use a cross pein or a straight pein hammer, according to the work.



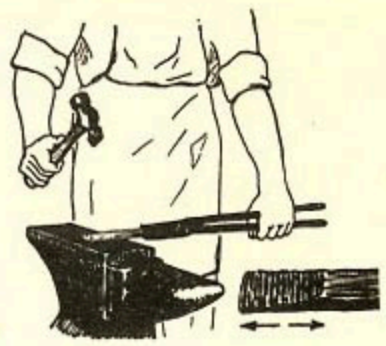
The illustration is of Stanley Cross Pein Hammer No. 352 — 24 oz.



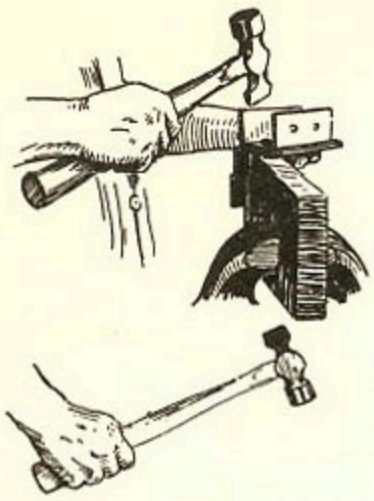
To stretch a piece of stock in the direction of its width, use a cross pein hammer.



The illustration is of Stanley Straight Pein Hammer No. 332 — 24 oz.



To stretch a piece of stock in the direction of its length, use a straight pein hammer.



The machinist usually holds his thumb around the hammer handle.

To strike heavy and medium blows, grasp the hammer firmly near the end of the handle and swing it with a free graceful sweep, well over the shoulder.

To strike light blows, as in driving rivets, grasp the handle nearer the head and swing it with a slight motion at the elbow but chiefly at at the wrist.

The blacksmith usually holds his thumb along the back of the hammer handle.

TO AVOID ACCIDENTS

Inspect the hammer every time it is checked out of the tool room. Be sure the head is firmly attached and the wedges driven tightly in place.

Avoid striking the handle to save it from breakage.

Avoid chipping the edges of the hammer face when striking hard metals.

Avoid striking with the cheek of the hammer as it is the weakest part.

How To Select and Use Boring Tools.

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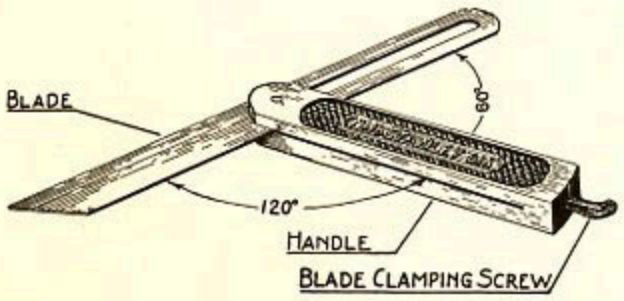
How To Use Setting and Riveting Hammers.

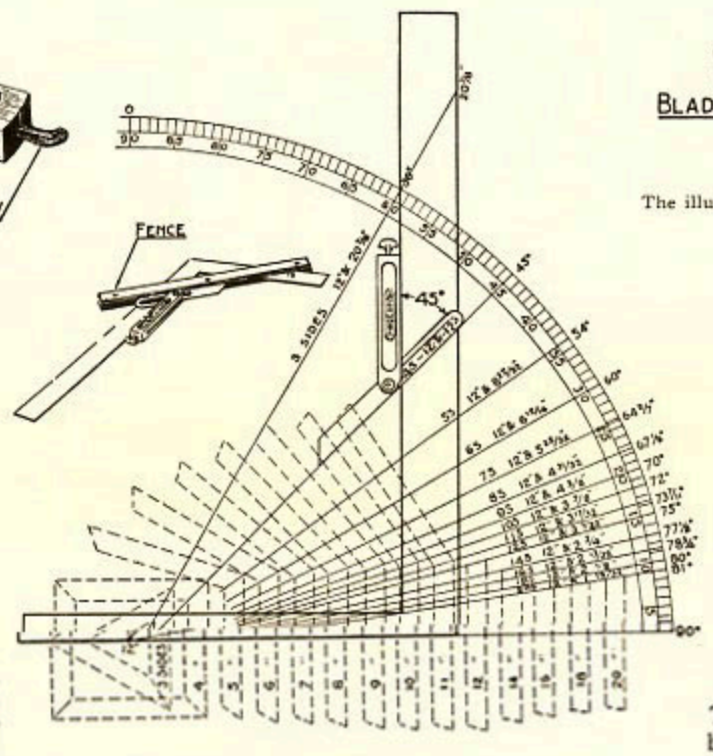
How To Use Cross Pein, Straight Pein and Ball Pein Hammers.

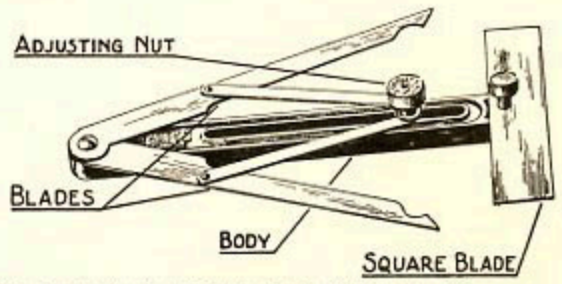
How To Use Bevels and Butt Gauges.

HOW TO USE
THE STANLEY T BEVEL
AND THE STANLEY ANGLE DIVIDER



The illustration is of Stanley T Bevel No. 18—8 in.





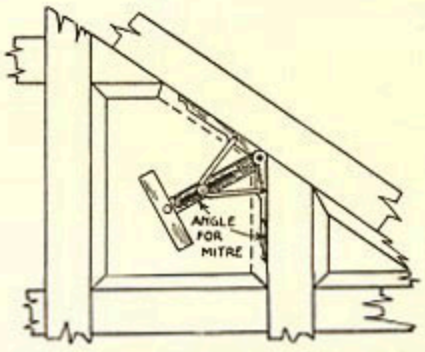
The illustration is of Stanley Angle Divider No. 30.

Laying off a mitre with a bevel.

Duplicating lines drawn at the same angle, as in laying off dovetails for a drawer.

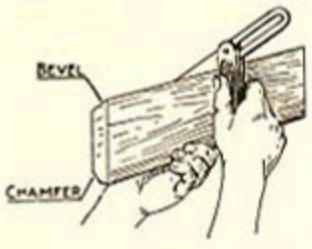
POLYGONS AND THEIR MITRES.

Set the bevel for these angles with the steel square. A fence of two strips of wood, shown above, will help to obtain a proper setting.



The Stanley Angle Divider is a double bevel. It is used to take off and divide angles for the mitre cut, in one operation. The handle is graduated on the back for laying off 4, 5, 6, 8 and 10 sided work.

Testing mitred ends with the bevel.



Testing beveled or chamfered edges with the bevel.

The bevel may also be set by a protractor, shown at the left, or by a line drawn at a desired angle to the edge of a piece of wood, shown at the right. The line may be laid off by a protractor, by measurement or by geometric construction. The blade may extend on one side only for testing inside corners.

Laying off a mitre with a Stanley Angle Divider. The square blade may be used for a try square.

How To Select and Use Hand Saws.

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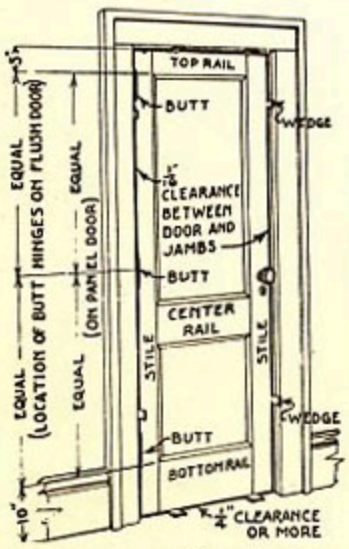
How To Use Nail Hammers and Screw Drivers.

How To Use Hand Drills and Bit Braces.

How To Use Marking Gauges and Try Squares.

HOW TO USE
THE STANLEY BUTT GAUGE

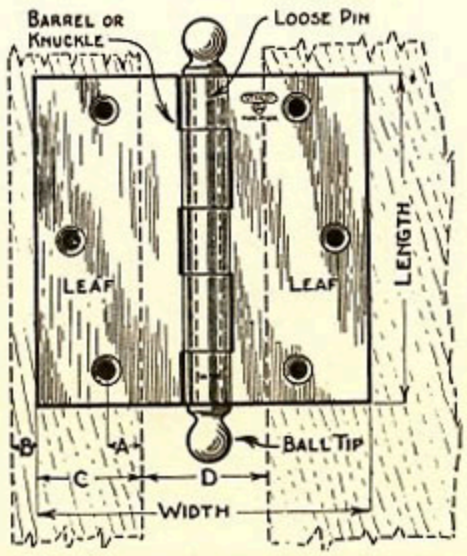
AND HOW TO HANG A DOOR WITH STANLEY BUTT HINGES



Loose Pin Butt Hinge Specifications For Wood Doors.

Doors Larger Than 5 Ft. Should Have Three Butt Hinges, One For Each 2½ Ft. of Height.		
Size and Type of Door		Size of Butt Hinge
½", ¾" Cupboard Doors	up to 24" wide	2½"
⅞" to 1⅛" Screen Doors	up to 36" "	3"
1⅛" to 1⅜" Doors	up to 32" "	3½"
" " " "	over 32" to 37"	4"
1⅜, 1⅜", 1⅝", 1¾" Doors	up to 32" wide	4½"
" " " "	over 32" to 37"	5"
" " " "	over 37" to 43"	5" Ex Heavy
" " " "	over 43" to 50"	6" Ex Heavy
2", 2½", 2½" "	up to 43" wide	5" Ex Heavy
" " " "	over 43" to 50"	6" Ex Heavy

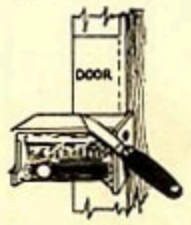
The illustration is of Stanley Wrought Steel Butt Hinge No. 241½—3½" x 3½"



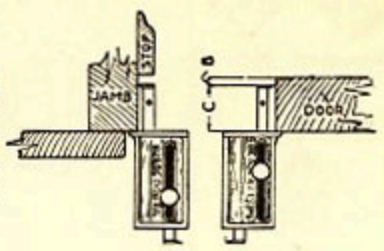
A. Keep this distance sufficient to prevent splitting.
B. Set back enough to prevent splitting when chiseling.
C. Width of the gain.
D. Maximum clearance when door is open.

The illustration is of Stanley Butt Gauge No. 94.

To square lines for the length of the gain, hold the flange of the butt gauge against the side of the door, or the jamb, and use it like a try square as shown in the illustration.

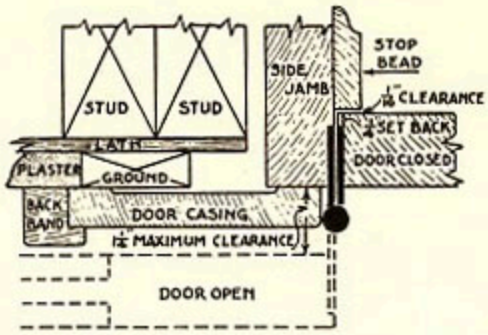


To gauge the width of the gain, adjust the gauge as shown for the dimension "C". This is the thickness of the door less the set back "B", usually ¼".

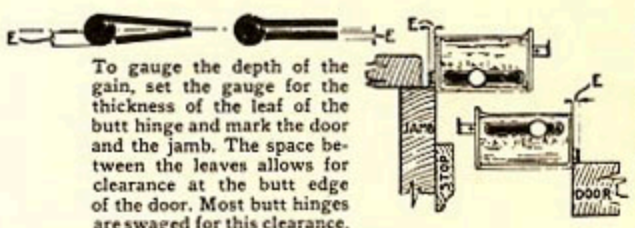


How to Hang a Door

1. Saw off lugs (the projecting ends of the stiles) at top and bottom of door.
2. Plane the butt stile to fit side jamb. Plane to the correct width of the opening at top and bottom after subtracting ⅛" for clearance, or 1/16" for each side. The lock stile should be beveled slightly.
3. Plane door to fit at the top, then scribe and plane the bottom allowing 1/16" for clearance at the top and ¼" or more at the bottom for rugs.
4. Wedge the door in place and mark the position of the butt hinges on the door and jamb at the same time, as illustrated.
5. Remove the door and square lines with the butt gauge for the length of the butt hinge or gain. Gauge the width of the gain and the depth of the gain with the butt gauge. Repeat on the jamb.
6. Chisel the gains as illustrated. See Stanley Chisel Charts No. 120 and 121.
7. Draw the pins from the butt hinges and screw one leaf to the door and one to the jamb. See Stanley Screw Driver Chart No. 119.
8. Put the door in position and slip the pins in place.
9. If the door hangs away from the jamb, the gains should be deeper. If the door binds against the jamb, place a piece of cardboard between the butt hinge and the bottom of the gain.
10. The stop beads should then be nailed in place, allowing clearance.



Application of 3½" x ½" Butt Hinge.



To gauge the depth of the gain, set the gauge for the thickness of the leaf of the butt hinge and mark the door and the jamb. The space between the leaves allows for clearance at the butt edge of the door. Most butt hinges are swaged for this clearance, but some small butt hinges are straight. For straight butt hinges set the gauge for slightly less than half the thickness of the barrel.

Length, width and depth of gain laid off.

Gain scored and ends notched to aid in chiseling.

Gain finished. The bottom smoothed by paring with chisel.

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How To Use Bevels and Butt Gauges.

How To Use Spoke Shaves and Doweling Jigs.

HOW TO USE THE
STANLEY DOWELING JIG

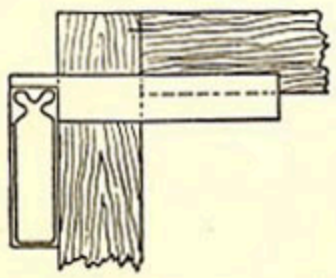
EXAMPLE: LAYING OUT FOR CORNER JOINT

Doweled Corner Joint

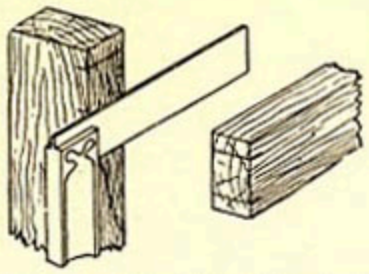
Doweled Mitre Joint

Doweled Circular Segment

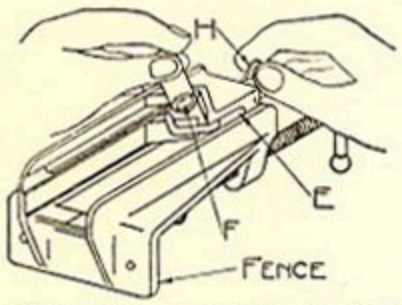
Mortising



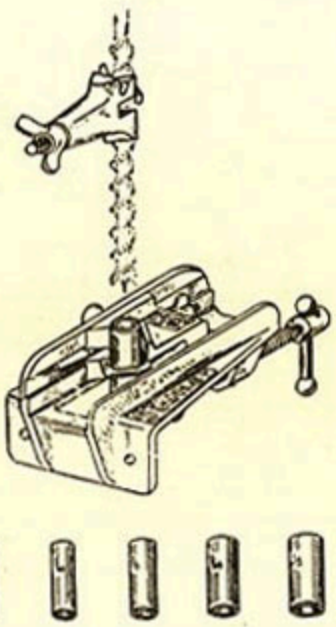
1 Indicate on face side the location for any number of dowels desired.

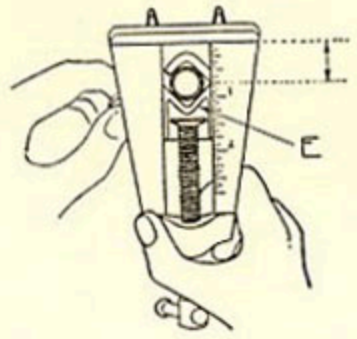


2 Square a line across the edge on both pieces from the marks indicated.

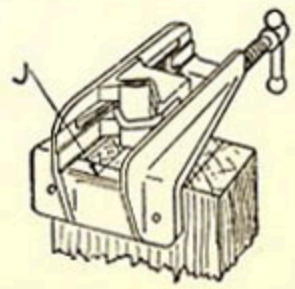


3 Select the proper size dowel and the same size guide "F". Place the guide in the slide "E" with the two marks on the guide downward and parallel to the fence and fasten securely with the thumb nut "H".

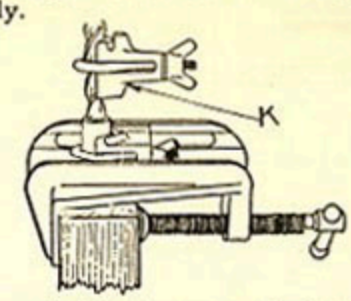




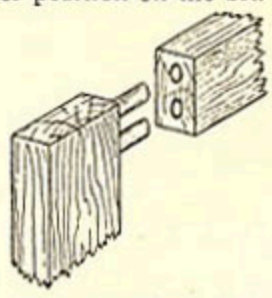
4 Adjust the slide "E" so that the marks on the guide will be at the proper graduation to bring the center of the hole the distance desired from the face of the stock.



5 Place the doweling jig on one of the pieces of stock with the fence next to the face side. Bring the mark "J" even with the squared line on the edge of the stock. Clamp securely.



6 Place the bit of proper size into the guide, using care not to strike the cutting edge of the bit against the steel guide. Bore for each hole —if it is desired to bore to a given depth, place the depth gauge "K" in the proper position on the bit.



7 Place dowels in holes and complete the joint.

Doweled End Joint

Doweled Splice Joint

Doweled Stock

Illustration is of Doweling Jig No. 59 with 5 Guides: 1/4, 5/16, 3/8, 7/16 & 1/2 in.

Doweling Jig No. 60 is the same with 9 Guides: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16 & 3/4 inch.

How To Select and Use Hand Saws.
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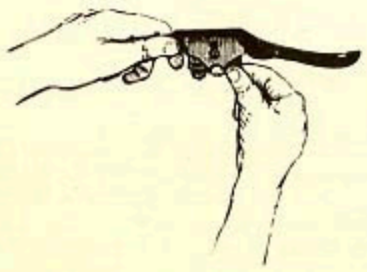
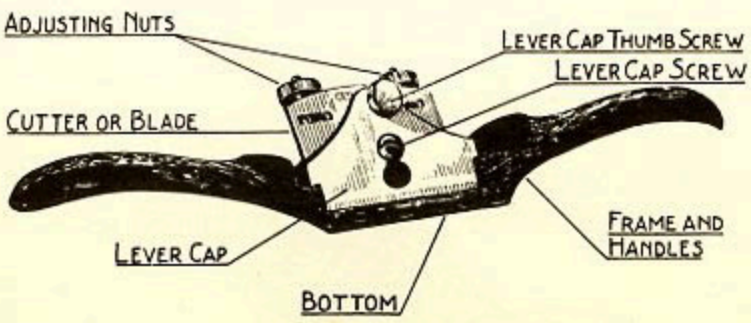
How To Use Hand Drills and Bit Braces.
How To Use Marking Gauges and Try Squares.
How To Use Bench and Block Planes.

HOW TO USE
THE STANLEY SPOKE SHAVES

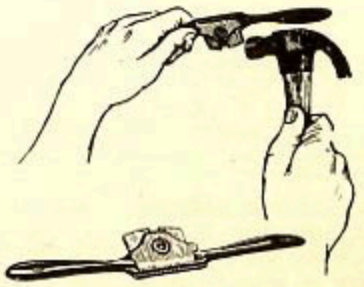


To set a Stanley No. 151M Spoke Shave, hold the Spoke Shave with the bottom in line with the eye. See Stanley Plane Chart. Turn the adjusting nuts until the cutting edge projects for an even shaving and about the thickness of a hair. Test for depth of cut.

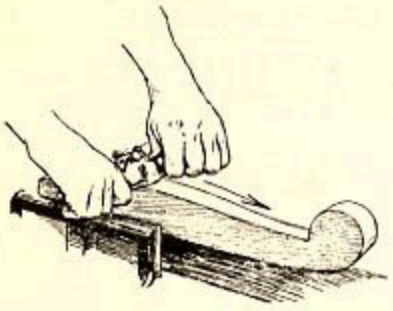


The illustration is of Stanley Adjustable Spoke Shave No. 151 M.

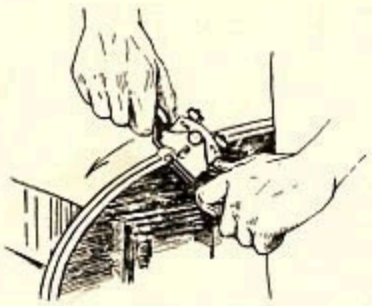
The Spoke Shave is practically a plane with the bottom short enough to follow curves.
The blade or cutter of the iron Spoke Shave is sharpened like a plane blade. See Stanley Charts.



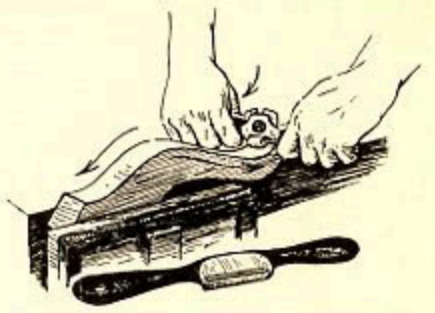
To set a Spoke Shave without adjusting nuts, such as the Stanley Convex Bottom Spoke Shave No. 63X, gently tap the end of the blade to make it project the thickness of a hair. To adjust the blade laterally, to take an even shaving, tap it on the side that projects too much to draw it in. Tighten the cap screw with a screw driver.



The Spoke Shave is usually pushed. The flat bottom Spoke Shave is used on convex and concave edges where the curves have a long sweep. Care must be exercised to cut with the grain of the wood.



The Spoke Shave is also used to chamfer and to round edges. Special Spoke Shaves are available. Stanley No. 65 with fences for chamfering and Stanley No. 55 with a hollow or concave bottom for rounding edges.



The Convex Bottom Spoke Shave No. 63X is designed to cut concave curved edges having small sweeps.

How To Select and Use Boring Tools.

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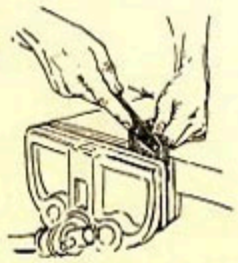
How To Use Spoke Shaves and Doweling Jigs.

How To Use Hand and Cabinet Scrapers.

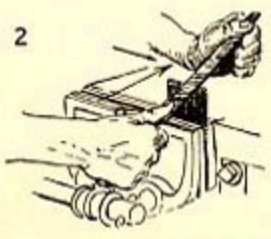
HOW TO SHARPEN AND USE
THE STANLEY CABINET SCRAPER

1

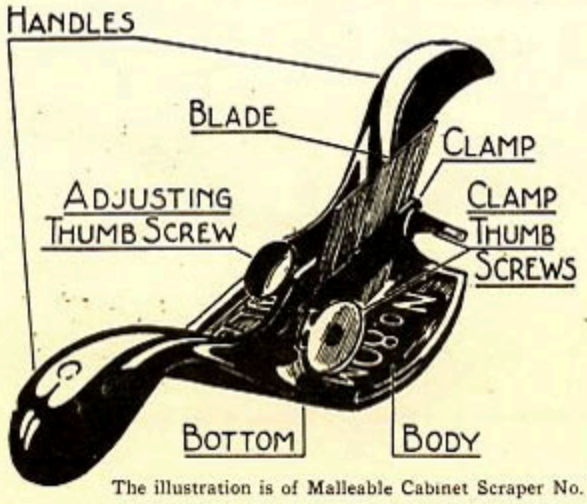


<u>To Sharpen a Bevel Edge Scraper Blade:</u> Remove the old burr with a smooth mill file held flat against the face or flat side of the blade.

2

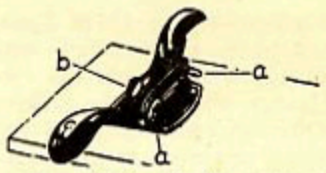


File or grind a bevel of about 45°. Push the file forward and to the side with one sliding motion.



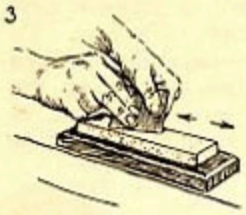
The illustration is of Malleable Cabinet Scraper No. 80 M.

<u>To Adjust and Use the Cabinet Scraper:</u> Loosen the adjusting thumb screw and the clamp thumb screws. Insert the blade from the bottom with the bevels toward the adjusting thumb screw.



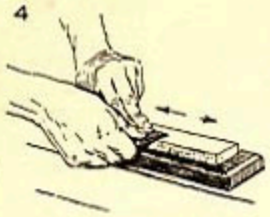
Bring the edge of the blade even with the bottom of the scraper body, by standing it on a flat surface and pressing the blade lightly against the wood. Tighten the clamp thumb screws "a a". Bow the blade by tightening the adjusting thumb screw "b", to make it project enough to take a thin shaving. If one corner of the blade projects too far, it can be drawn in by tapping the side of the blade near the top.

3



Whet the bevel side of the blade on the oil stone.

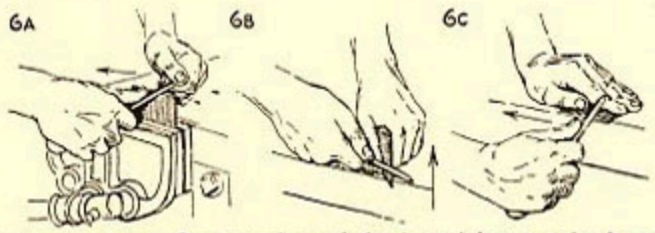
4



Whet the face side of the blade to remove the wire edge.

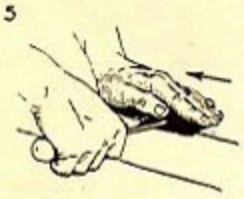
The Cabinet Scraper is used for the final smoothing before sandpapering. It removes the slight ridges left by the plane. It is also used to smooth surfaces that are difficult to plane because of curly or irregular grain.

6A 6B 6C

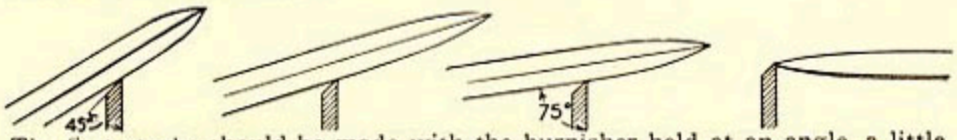


Turn the edge with a few firm strokes of the burnisher on the bevel side of the blade. The scraper can be held in any of the three ways shown above. Draw the burnisher toward you the full length of the blade, with a sliding stroke. Some prefer to stroke both ways from the center toward the ends. A drop of oil on the burnisher helps.

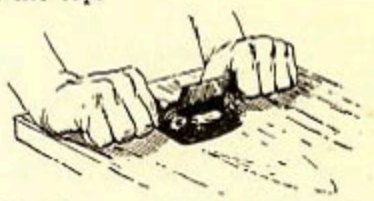
5



Draw the edge with a few firm strokes on the face side of the blade. Hold the burnisher flat on the face side of the blade.



The first stroke should be made with the burnisher held at an angle, a little greater than the bevel. Increase the angle until, at the last stroke, the burnisher is held at about 75° to the flat face of the blade. If the edge should be turned too far over, it can be raised by drawing the point of the burnisher along the edge, under the burr.



Try the scraper and change the adjustment until it takes a thin even shaving. Hold it turned a little to the side to start a cut. The Cabinet Scraper is usually pushed but it can be pulled. Dust, instead of a shaving, indicates a dull scraper.

How To Select and Use Hand Saws.

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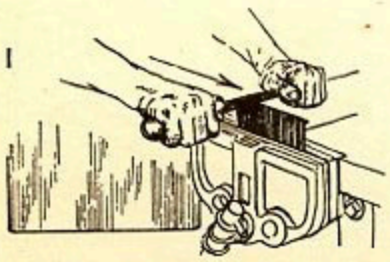
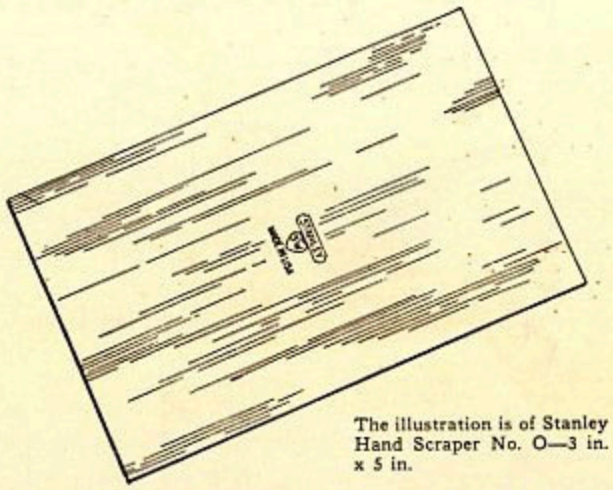
How To Use Bench and Block Planes.

How To Assemble A Plane Iron—How To Set A Plane.

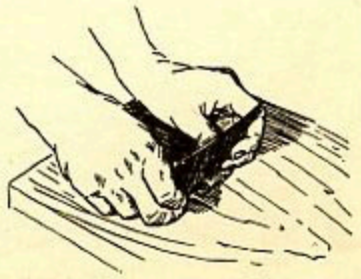
HOW TO SHARPEN AND USE
THE STANLEY HAND SCRAPER

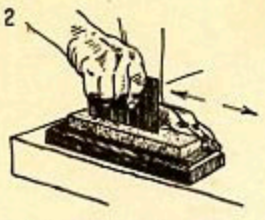


To Sharpen the Hand Scraper: File the edges square and straight by draw-filing with a smooth mill file. Round the corners slightly.

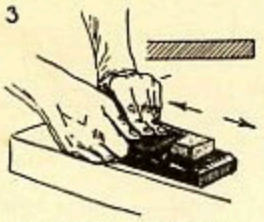


The illustration is of Stanley Hand Scraper No. O—3 in. x 5 in.



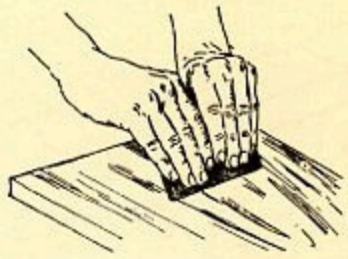


Whet the edge, holding the blade square to the surface of the oil stone. Some prefer to hold the scraper square to the edge of the oil stone.

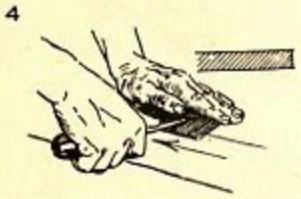


Remove the burr by whetting the scraper flat on the oil stone. The edges should be very smooth and sharp.

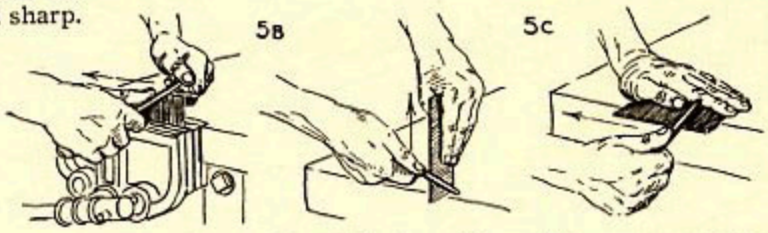
The Hand Scraper is used for the final smoothing before sandpapering. It removes the slight ridges left by the plane. It is also used to smooth surfaces that are difficult to plane because of curly or irregular grain.



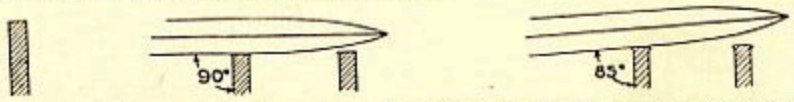
The hand scraper can be either pushed or pulled as the grain of the wood demands or whichever is more convenient.



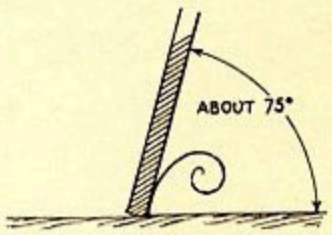
Draw the edge with three or four firm strokes of the burnisher held flat on the scraper.



Turn the edge with a few strokes of the burnisher. The scraper can be held in any of the three ways shown above. Draw the burnisher toward you the full length of the blade, with a sliding stroke.



To turn the edges out, the burnisher is held at 90° to the face of the blade for the first stroke. For each of the following strokes, tilt the burnisher slightly until at the last stroke it is held at about 85° to the face of the blade. A drop of oil on the burnisher helps.



The hand scraper is held firmly between the thumb and fingers at an angle of about 75° and sprung to a slight curve, by pressure of the thumbs.

Dust, instead of a shaving, indicates a dull scraper.

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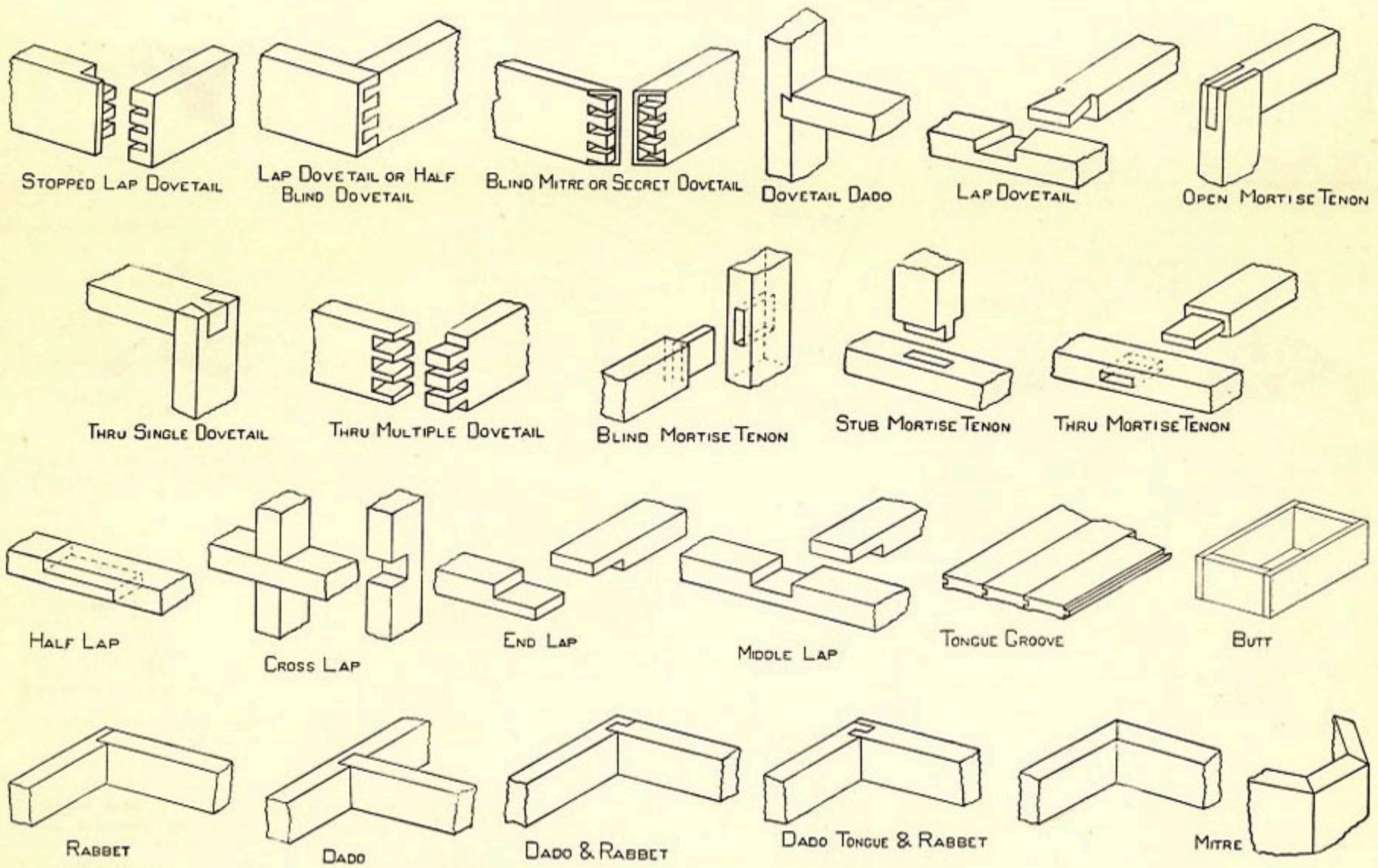
How To Use Spoke Shaves and Doweling Jigs.

How To Use Hand and Cabinet Scrapers.

Common Cuts and Joints in Wood.

COMMON WOOD JOINTS



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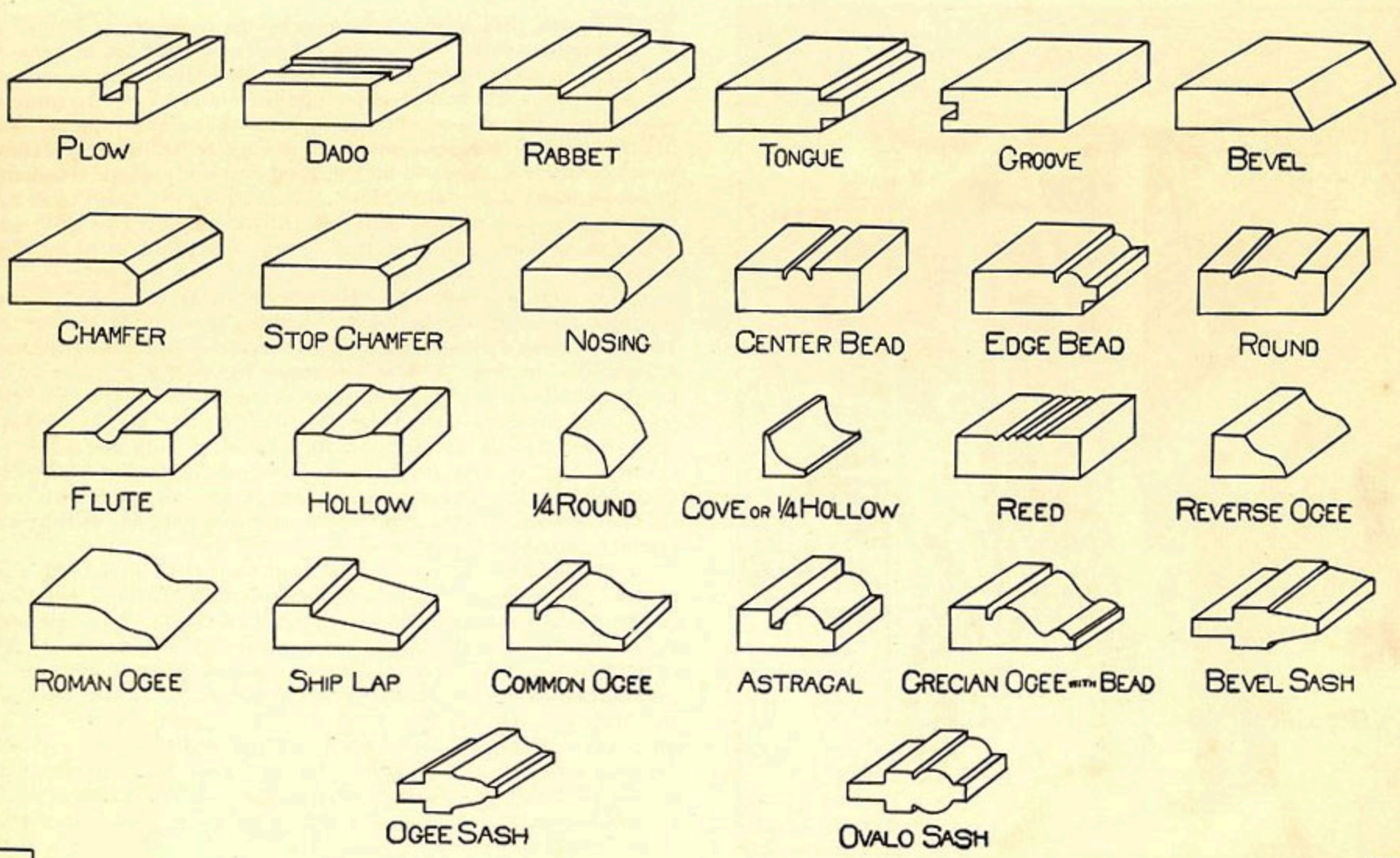
COMMON CUTS IN WOOD



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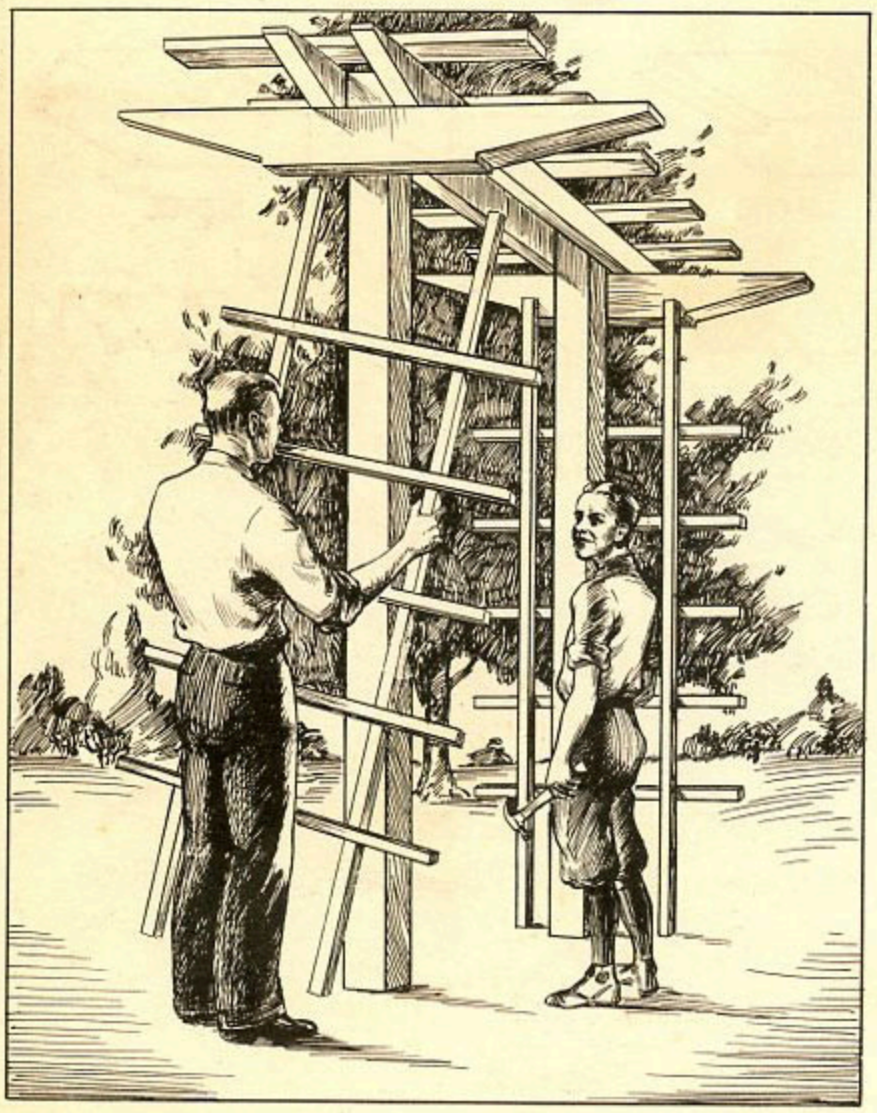
✦ ✦ USE AND CA



IF IT is true that "a man is known by the company he keeps," it is quite true that "a craftsman is known by the tools he keeps—and how he keeps them." Occasionally good work may be turned out with poor tools, but in such a case the result is only the unusual accomplishment of a worker of superior skill. The beginner will find it safer to consider himself an average rather than an exceptional craftsman. As such, he will need every advantage obtainable to accomplish good results. More than anything else, good tools will give him the best possible start toward the acquiring of skill, and will give him lasting satisfaction. They will prove to be his best friends.

Have you ever seen a skilled cabinet maker or pattern maker purchase tools? In the first place, he goes to a reliable dealer and asks for a reliable brand. These precautions constitute his guarantee of first-class quality. You will next see him weigh the tool in his hand, and handle it in all possible working positions. It must "feel good" and have the right balance. You'll find he spends as much time in selecting a tool as most men do in picking out a suit of clothes. If he, with all his skill, requires nothing but the best, what can the beginner with little or no skill hope to accomplish with tools the expert would reject? Don't let a poor tool spoil one of the most fascinating hobbies known.

It is far better to own a few good tools than any number of poor ones. By the same token, it is far better to master a few tools than to have a smattering of knowledge concerning a large number. A good way to guard against such a possibility is to purchase tools on the budget plan. Start a "buy-a-tool-a-week" or "buy-a-tool-a-month" club with yourself. With such a plan you will not only feel their cost far less, but you'll have an opportunity to get acquainted with the one you have just purchased, before a new one arrives on your bench to divide your attention. If your plan calls for the purchase of only one tool at a time, you will be more likely to purchase a good one and less apt to "stretch" your money over a number of poor ones.

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How To Sharpen Plane Irons.

RE OF TOOLS ✦

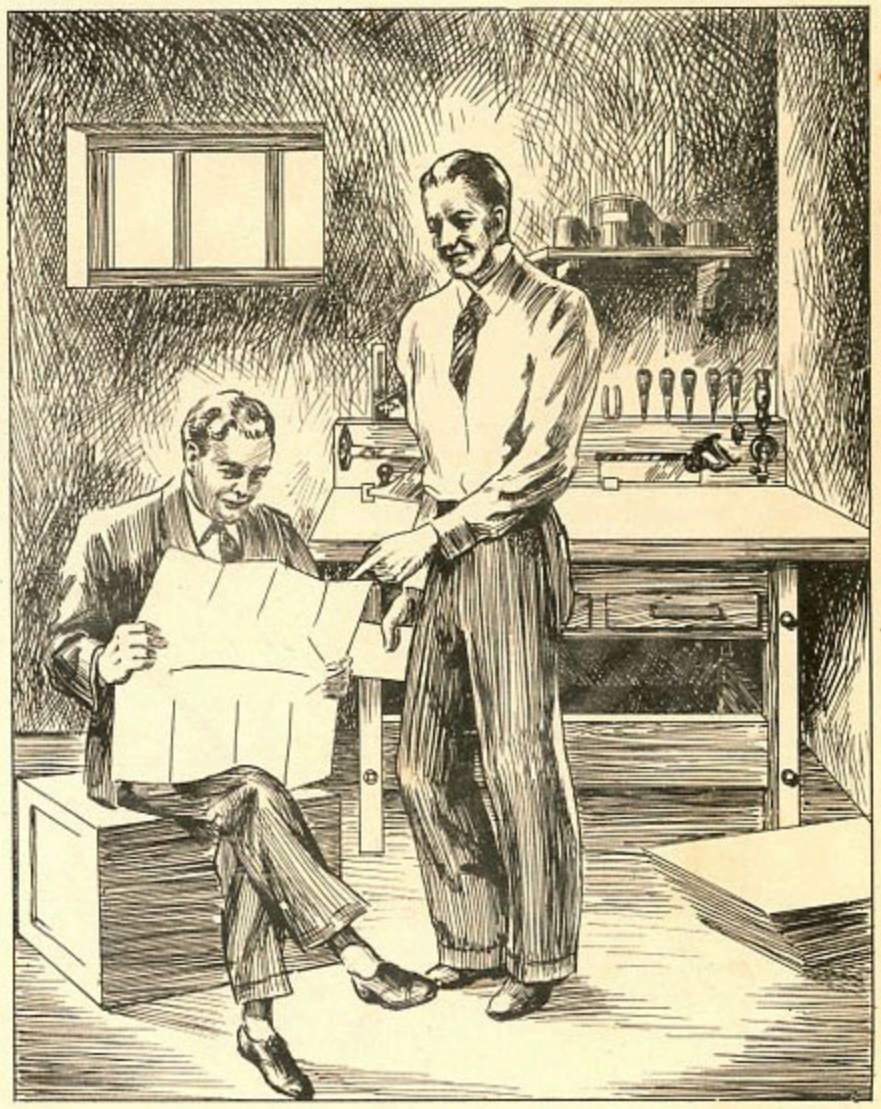
When a new tool arrives at your bench, your first job is to get thoroughly acquainted with it. This Tool Guide has been prepared as a means of giving you a proper introduction to your tools. Follow its advice and you'll find that you and the new tool have become old friends before another tool arrives on the scene.

Learn all about it. Take it apart and put it together. Work with it on scrap wood until you are its master. Practice every known operation it affords. Most of them have been illustrated in this book. Handle it carefully and correctly, and you can do with it anything and everything for which it is designed. Treat it badly and you'll accomplish nothing with it but poor work.

Whenever you quit the work you are doing with a tool, wipe it off and put it carefully away. A tool panel on which every tool has a place of its own is recommended rather than the usual tool box. Such a panel eliminates the possible nicking of keen edges, which often occurs when sharp tools are piled in a box. At the same time, the panel keeps each tool in plain view of the worker. This eliminates searching for tools, which for some reason always seem to be at the bottom of the box.

Keep a light film of oil on your tools to prevent possible rusting, and above all else keep them sharp. A dull edge is not only inefficient but often actually dangerous. When a tool becomes dull, learn to sharpen it yourself.

A good tool is a life-long investment and the craftsman's best friend. Treat it as such and you'll be repaid a thousand times in the results you obtain from its use. When you have learned how to choose, use, and keep good tools, you will no longer require this Tool Guide. You can then hand it to some amateur with the compliments of an expert!



STANLEY TOOLS

NEW BRITAIN, CONNECTICUT

How To Select and Use Boring Tools.

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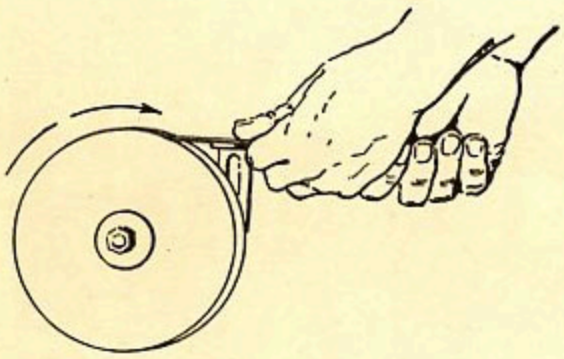
Common Cuts and Joints in Wood.

HOW TO GRIND
STANLEY PLANE IRONS
(THIS ALSO APPLIES TO CHISELS)



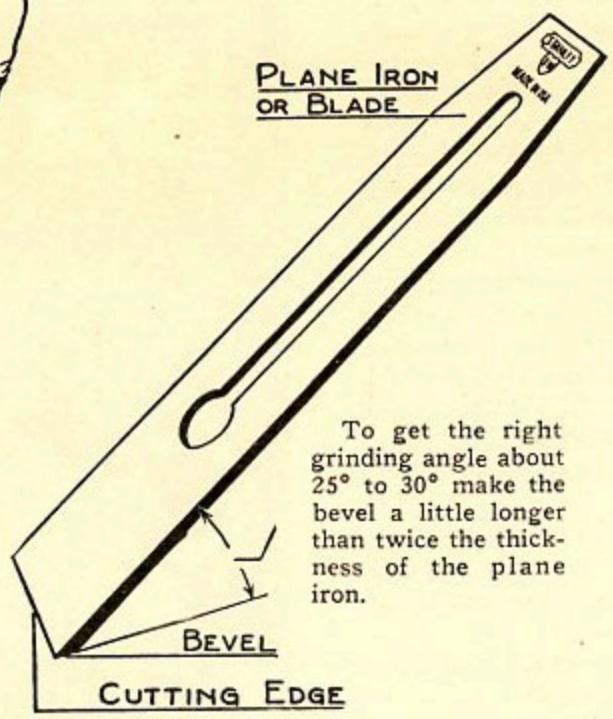
Grinding straightens the edge and restores the bevel preparatory to sharpening by whetting on the oil stone.

The Grind Stone should turn toward the Plane Iron.

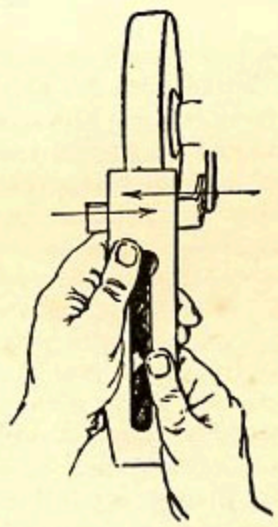
Use the Guide as it assures a flat even bevel.

Keep the Plane Iron cool to prevent burning, or softening the steel, by frequent dipping in water.

Stones running in water or oil are preferable.



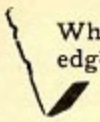
To get the right grinding angle about 25° to 30° make the bevel a little longer than twice the thickness of the plane iron.



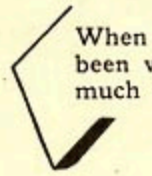
Move the Plane Iron from side to side to grind all parts of the bevel and to keep the wheel true.

The edge should be straight and almost at right angles to the sides of the Plane Iron.

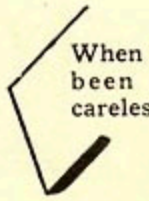
WHEN TO GRIND A PLANE IRON OR A CHISEL



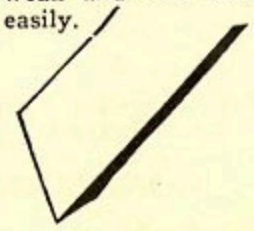
When the cutting edge is nicked.



When the bevel has been worn down by much whetting.



When the bevel has been rounded by careless whetting.



Avoid a bevel too long and thin. It is weak and will nick easily.

Avoid a bevel too short and thick. It will not enter the wood easily.

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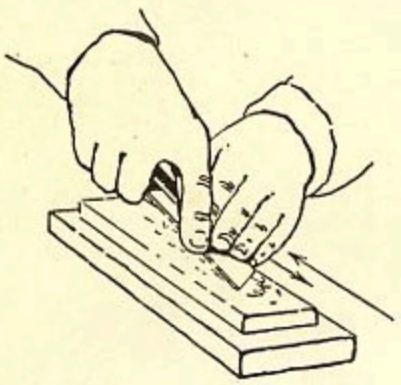
HOW TO WHET
STANLEY PLANE IRONS
(THIS ALSO APPLIES TO CHISELS)

Whet the Plane Iron on the oil stone to produce the real sharp cutting edge.



Hold the Plane Iron in the right hand with the left hand helping.

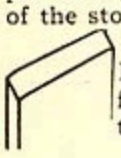
Place the bevel on the stone with the back edge slightly raised.

Move the Plane Iron back and forth.

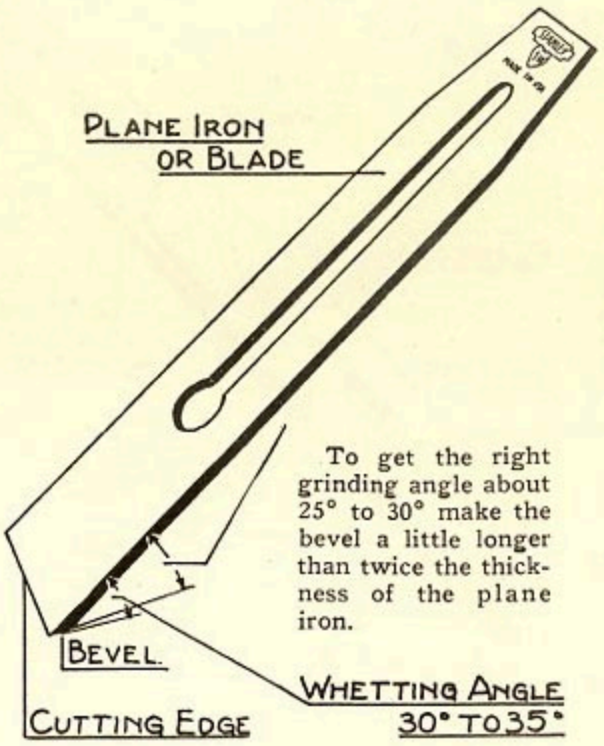
TO KEEP THE BEVEL STRAIGHT

Be sure the hands move parallel to the stone so that the angle between the Plane Iron and the stone will stay the same throughout the stroke.

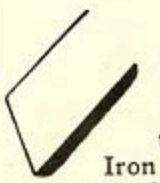
Use enough oil to keep the surface of the stone moist. It keeps the stone sharp by preventing particles of steel filling the pores of the stone. Try to wear the stone evenly.



Plane marks will show less on a finished surface if the corners of the Plane Iron are slightly rounded.

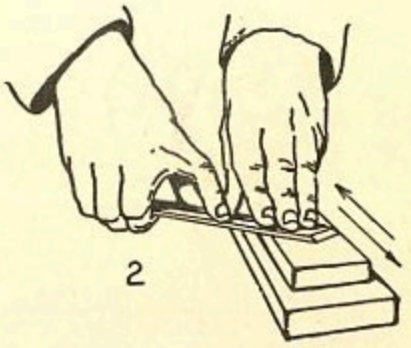


To get the right grinding angle about 25° to 30° make the bevel a little longer than twice the thickness of the plane iron.



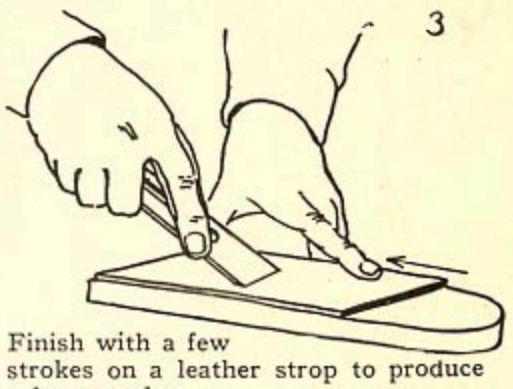
Rocking the Plane Iron produces a rounded bevel that will not cut well.

A bevel on the flat side of the Plane Iron prevents the Cap Iron fitting tight. Shavings will clog the plane.



Remove the wire or feather edge by taking a few strokes with the flat side of the Plane Iron held FLAT on the stone. Avoid the slightest bevel on this side.

If a nick or a shiny edge of bluntness can be seen repeat both processes of whetting.



Finish with a few strokes on a leather strop to produce a keener edge.

How To Select and Use Boring Tools.

How To Use Cold Chisels.

How To Use Setting and Riveting Hammers.

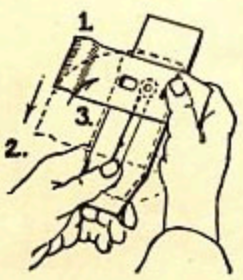
How To Use Cross Pein, Straight Pein and Ball Pein Hammers.

How To Use Bevels and Butt Gauges.

How To Use Spoke Shaves and Doweling Jigs.

How To Use Hand and Cabinet Scrapers.

HOW TO ASSEMBLE THE
STANLEY DOUBLE PLANE IRON

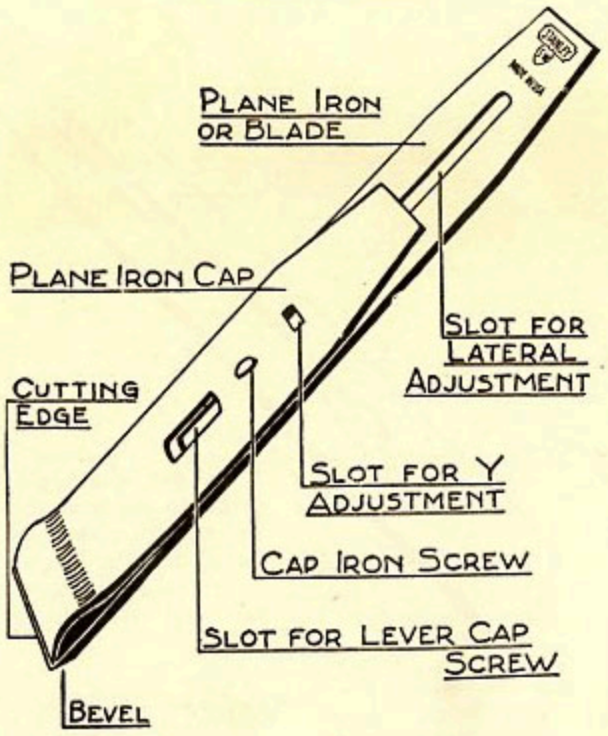


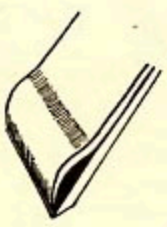
To put the Plane Iron and the Plane Iron Cap Together: 1—Lay the Plane Iron Cap on the flat side of the Plane Iron, as shown, with the screw in the slot. 2—Draw the Plane Iron Cap back. 3—Turn it straight with the Plane Iron.

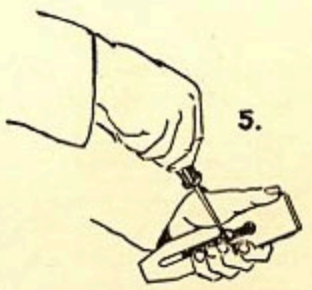
4—Advance the Plane Iron Cap until the edge is just back of the cutting edge of the Plane Iron. The Plane Iron Cap must not be dragged across the cutting edge.

The Plane Iron Cap should extend $\frac{1}{16}$" back of the cutting edge for general work. On cross grained or curly wood it should be as near to the cutting edge as possible.

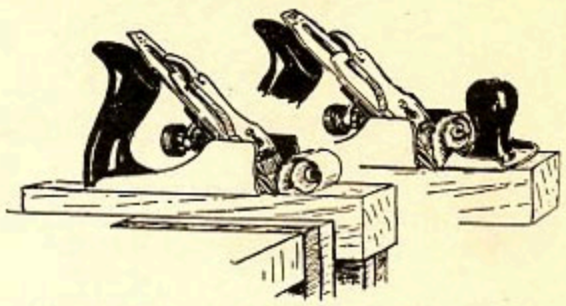
DOUBLE PLANE IRON



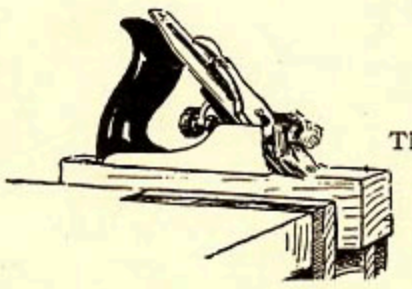




5—Hold the Plane Iron and the Plane Iron Cap firmly and tighten the screw to hold the two parts together.



The Plane Iron Cap Breaks and Curls the Shaving. Together with the toe of the Plane it prevents the wood splitting ahead of the cutting edge producing a smooth surface. The Plane Iron Cap also serves to stiffen the Plane Iron.



The Plane Iron Cap and the Toe removed The wood splits ahead of the cutting edge leaving a rough surface.

How To Select and Use Hand Saws.

How To Use Wood Chisels.

How To Use Nail Hammers and Screw Drivers.

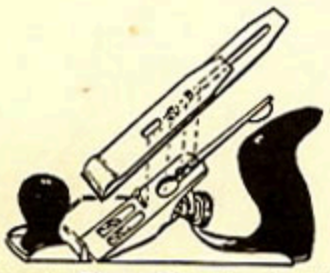
How To Use Hand Drills and Bit Braces.

How To Use Marking Gauges and Try Squares.

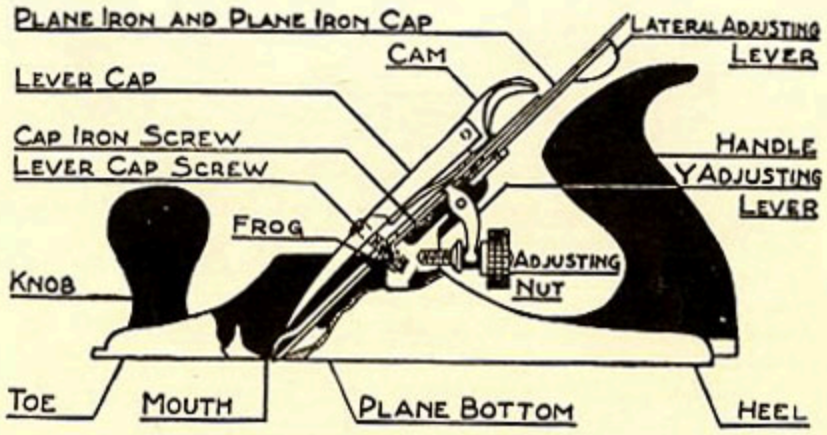
How To Use Bench and Block Planes.

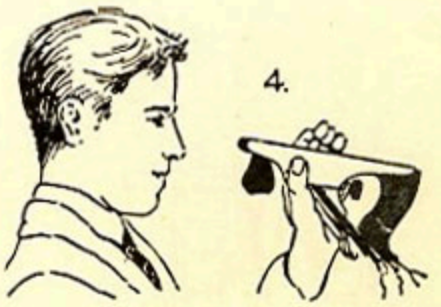
How To Assemble A Plane Iron—How To Set A Plane.

HOW TO SET THE STANLEY PLANE

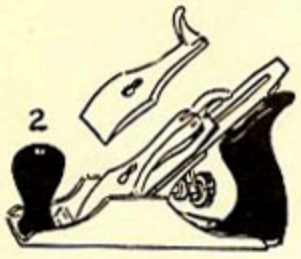


To Put the Plane Together lay the Plane Iron, bevel side down, on the Frog. Be sure the Roller on the Lateral Adjusting Lever, the end of the Y Adjusting Lever and the Head of the Plane Iron Cap Screw are correctly seated.





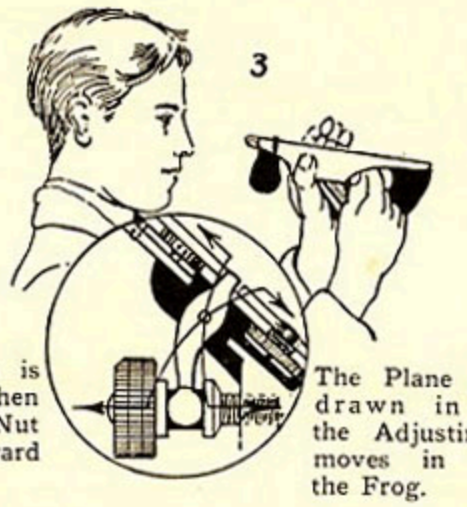
To Adjust for the Evenness of the Shaving sight along the bottom of the Plane and move the Lateral Adjusting Lever toward the right or the left.



Slip the Lever Cap under the Lever Cap Screw and press down the Cam. If the Plane Iron is in the correct position the Cam will easily snap in place. If the Cam will not snap in place easily, slightly loosen the Lever Cap Screw.

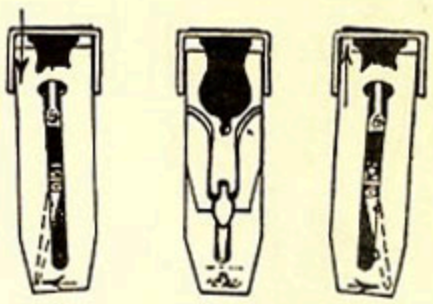
If the Plane Iron is not firmly held when the Cam is in place slightly tighten the Lever Cap Screw.

To Adjust for the Thickness of the Shaving sight along the bottom of the Plane and turn the Adjusting Nut until the cutting edge projects about the thickness of a hair.



The Plane Iron is pushed out when the Adjusting Nut moves out toward the Handle.

The Plane Iron is drawn in when the Adjusting Nut moves in toward the Frog.



Knob, Lever Cap and Plane Iron Cap removed to show the action of the Lateral Adjusting Lever.

How To Select and Use Boring Tools.

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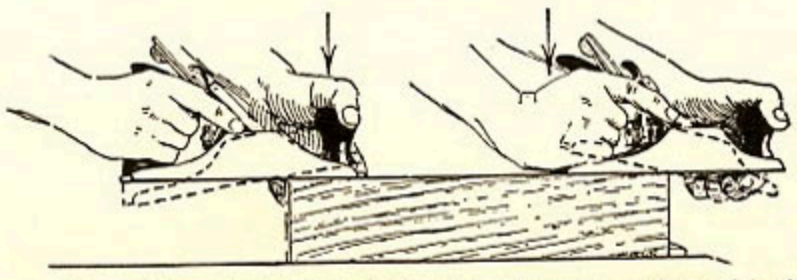
How To Use Bevels and Butt Gauges.

How To Use Spoke Shaves and Doweling Jigs.

HOW TO USE THE STANLEY PLANE

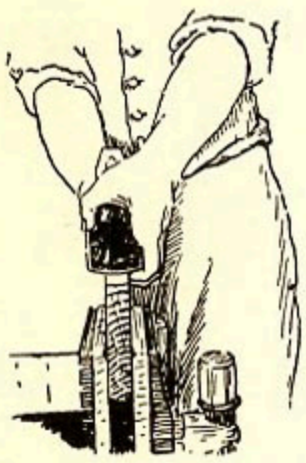
To Start Planing take an easy but firm position directly back of the work.



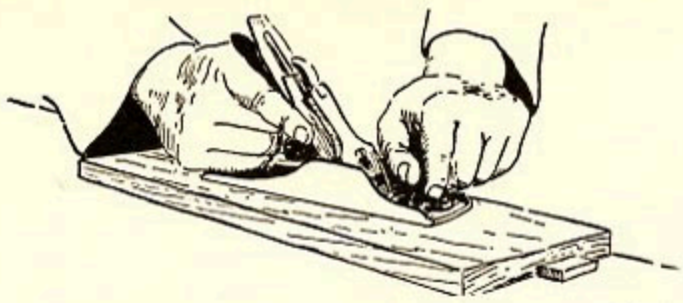
To Cut a Smooth Straight Edge the Plane is pushed with the grain, that is in the uphill direction of the fibres.

To Keep the Plane Straight press down on the knob at the beginning of the stroke and on the handle at the end of the stroke. Avoid dropping the Plane as shown by the broken lines. It rounds the corners.

At the End of the Stroke the weight of the body should be carried easily on the left foot.

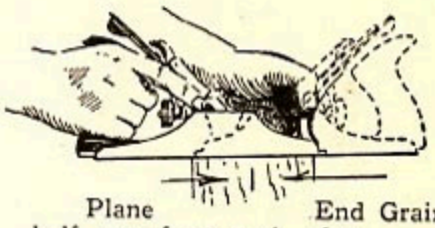


Hold the Plane square with the work face of the work.

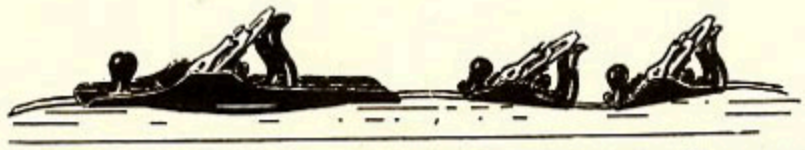


To Obtain a Smooth Surface plane with the grain. If the grain is torn or rough after the first stroke reverse the work.

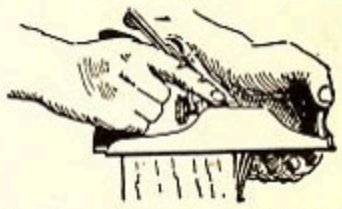
If the grain is cross or curly sharpen the Plane Iron carefully, set the Plane Iron Cap as near the Cutting Edge as possible and adjust the Plane Iron to take a very thin even shaving.



Plane End Grain half way from each edge.



It is easier to plane a long edge straight with a long plane than with a short one. A long plane bridges the low parts and does not cut them until the high spots are removed.



If the Plane is pushed all the way the corners will break.

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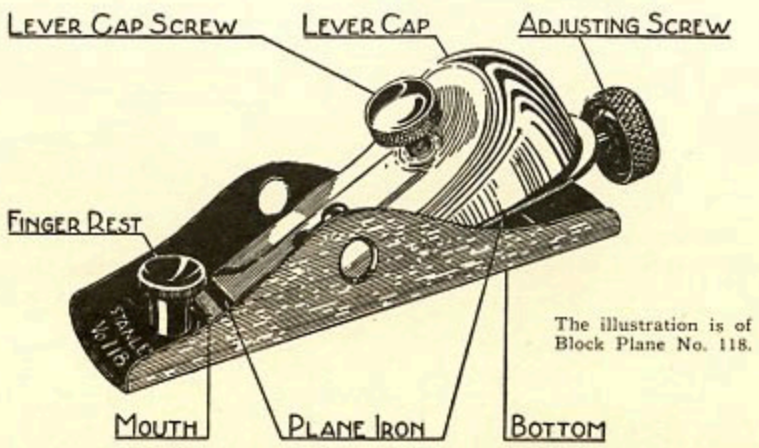
How To Use Bench and Block Planes.

HOW TO ADJUST AND USE
THE STANLEY BLOCK PLANE

To adjust the Plane Iron, vertically, for the thickness of the shavings, sight along the Plane bottom and turn the Adjusting Screw forward to push the Plane Iron out, or turn it back to pull the Plane Iron in.

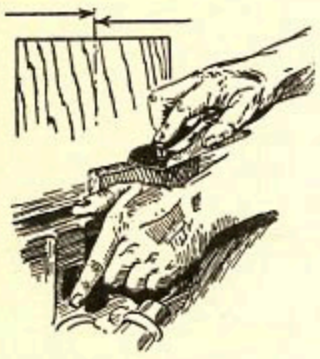


The illustration is of Block Plane No. 118.

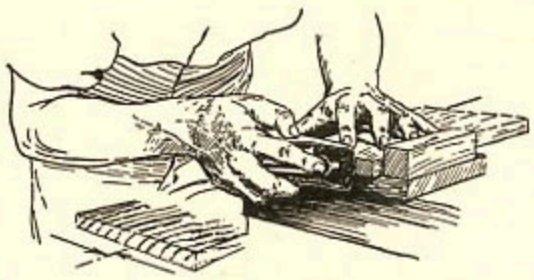
To adjust the Plane Iron laterally for evenness of shavings, loosen the Lever Cap Screw. Sight along the Plane bottom, press the Plane Iron to the right or to the left and tighten the Lever Cap Screw.

KEEP YOUR PLANE SHARP

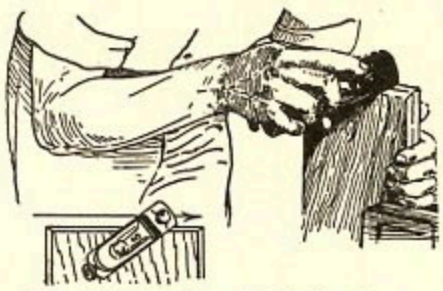
The Block Plane has a single Plane Iron set at a lower angle than the Plane Iron of the Smooth Plane, enabling it to cut end grain better than other planes. Because of the low angle the Plane Iron is set bevel up.



The Block Plane is used to plane small pieces and to plane the ends of mouldings, trim and siding.



The Block Plane is a tool used in one hand. This makes it easy to use when the work cannot be taken to a vise.



The Block Plane is the handiest tool for planing corners and chamfers on small pieces of wood.

The Block Plane is indispensable in shaping the hulls and spars of model boats and the parts of model airplanes.

How To Select and Use Boring Tools.

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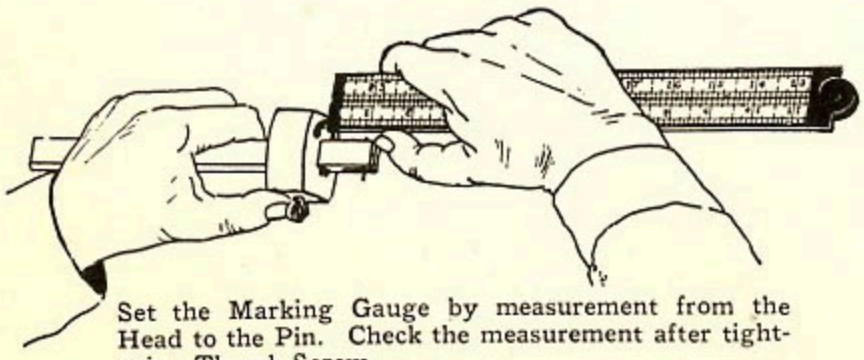
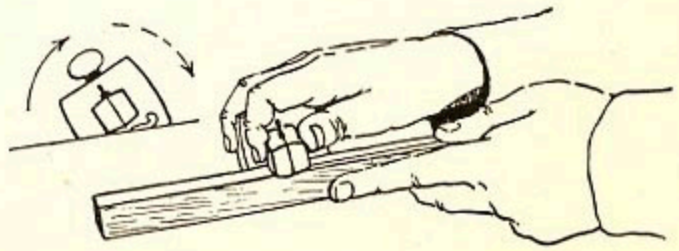
How To Use Bevels and Butt Gauges.

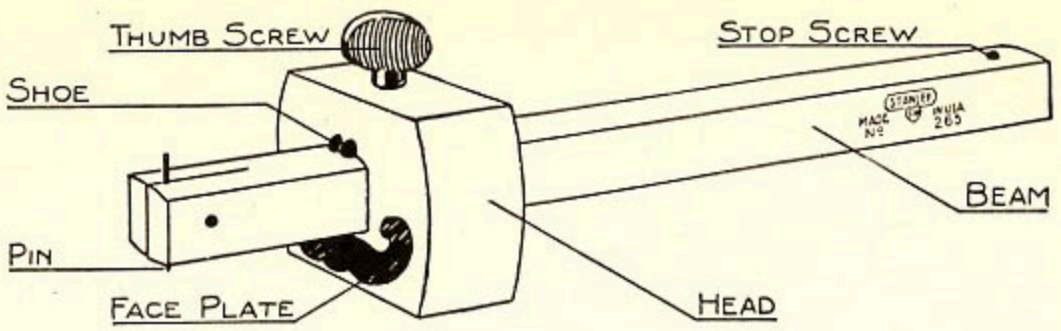
HOW TO USE THE
STANLEY MARKING GAUGE

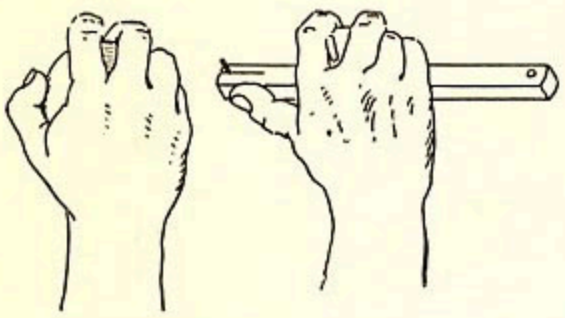


Set the Marking Gauge by measurement from the Head to the Pin. Check the measurement after tightening Thumb Screw.



Lay the corner of the beam on the wood and revolve the Gauge, with a slight wrist motion, to engage the Pin for a light line.

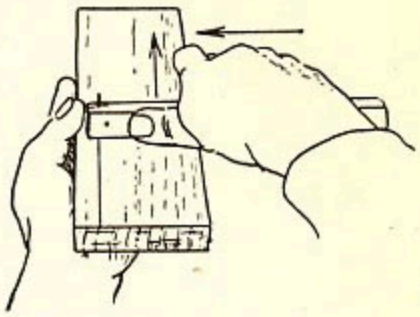




Hold the Gauge as you would a ball. Advance the thumb toward the Pin so as to distribute the pressure evenly between the Pin and the Head.

To make a Gauge Line push the Gauge forward, with the Head held tight against the work edge of the wood.

The pressure should be applied in the direction of the arrows.



The Pin should project about 1/16 in.

The Pin should be sharpened with a file so that it may make a knife-like line.

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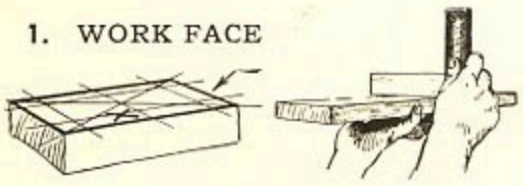
How To Use Hand Drills and Bit Braces.

How To Use Marking Gauges and Try Squares.

HOW TO USE
THE STANLEY TRY SQUARE

AND HOW TO SQUARE UP STOCK

1. WORK FACE



Plane one broad surface smooth and straight. Test it crosswise, lengthwise, and from corner to corner. Mark the Work Face X.

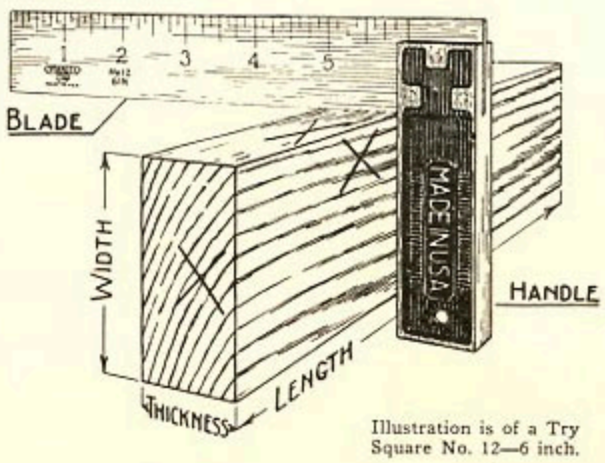
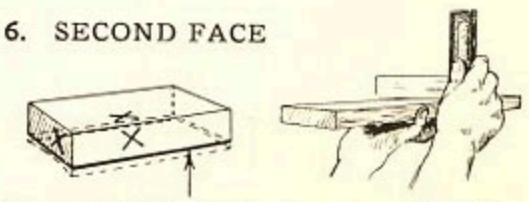


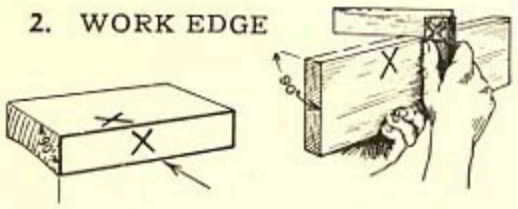
Illustration is of a Try Square No. 12—6 inch.

6. SECOND FACE



From the Work Face gauge a line for thickness around the stock. Plane the stock to the gauge line. Test the Second Face as the Work Face is tested.

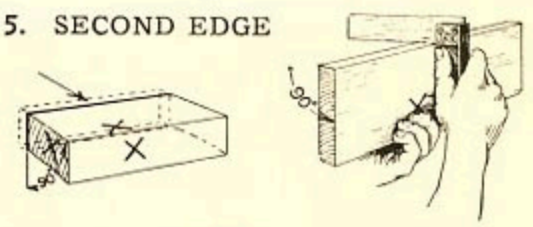
2. WORK EDGE



Plane one edge smooth, straight and square to the Work Face. Test it from the Work Face. Mark the Work Edge X.

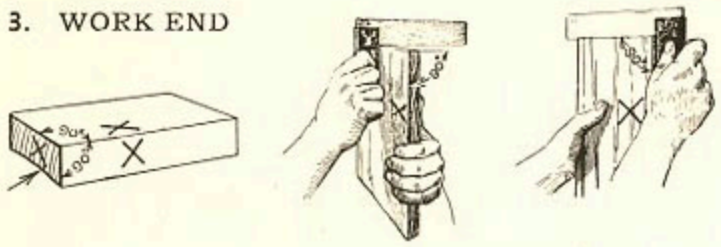
Hold the handle of the Try Square tight against the stock when testing ends, edges or scribing lines.

5. SECOND EDGE



From the Work Edge gauge a line for width on both Faces. Plane smooth, straight, square and to the gauge line. Test the Second Edge from the Work Face.

3. WORK END



Plane one end smooth and square. Test it from the Work Face and Work Edge. Mark the Work End X.

4. SECOND END

Measure length and scribe around the stock, a line square to the Work Edge and Work Face. Saw off excess stock near the line and plane smooth to the scribed line. Test the Second End from both the Work Face and the Work Edge.

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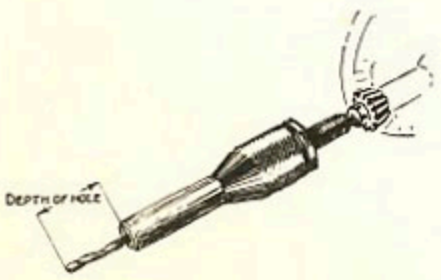
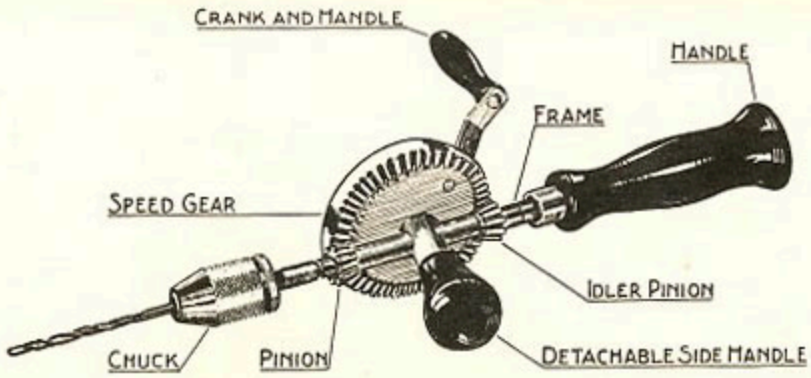
HOW TO USE

THE STANLEY HAND DRILL

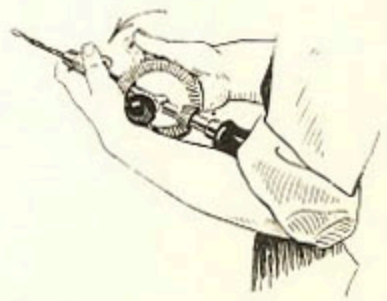


To drill holes of uniform depth, make a depth gauge. Cut a piece of wood or dowel the right length, so the drill will project the desired depth when the piece of wood is drilled and slipped over the drill.

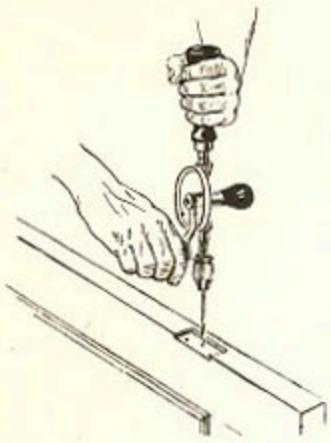


The illustration is of Stanley Hand Drill No. 617—¼" Chuck.

The Hand Drill is used for the rapid drilling of small holes, in both wood and metal. Holes in wood should be started with an awl to help center and locate the drill. Holes in metal should be center punched. When drilling through metal, relieve the pressure slightly before breaking through, to avoid breaking the drill. Drill points for wood are made in eight sizes from 1/16" to 11/64". Twist Drills principally for metal are made in a vast range of sizes.

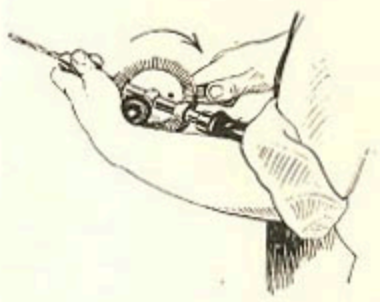


To place the drill in the chuck, open it only slightly more than the diameter of the drill. This helps to center it. Insert the drill. Tighten the chuck by pushing forward on the crank with the right hand, while holding the chuck shell tight with the left thumb and forefinger.



Hold the drill steady in the direction desired and exert an even pressure. Turn the crank at a constant speed and not too fast.

Hold the drill straight. Do not wobble while turning; it makes the hole over-size and is likely to break the drill.

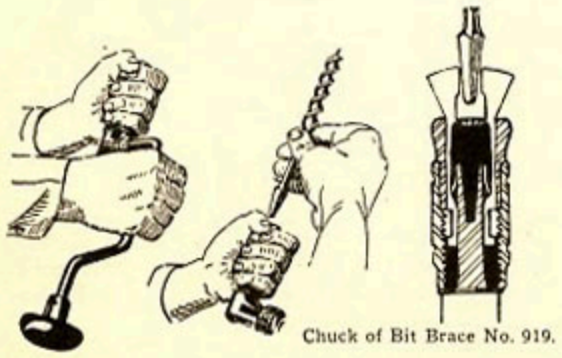


To remove the drill, hold the chuck shell tight with the left thumb and forefinger, and turn the crank backward with the right hand, as shown by the arrow.

It is sometimes desirable to hold the drill by the side handle and press the body against the frame handle like a breast drill.

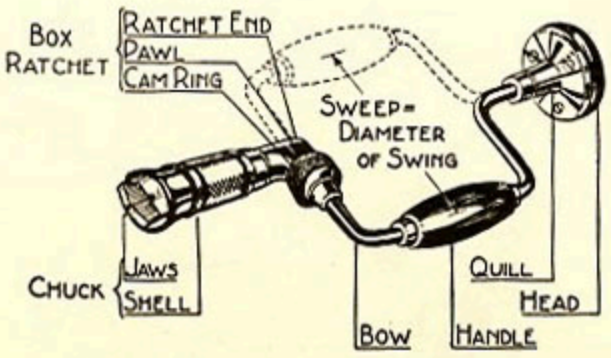
How To Select and Use Hand Saws.
How To Use Wood Chisels.
How To Use Nail Hammers and Screw Drivers.
How To Use Hand Drills and Bit Braces.

HOW TO USE
THE STANLEY BIT BRACE

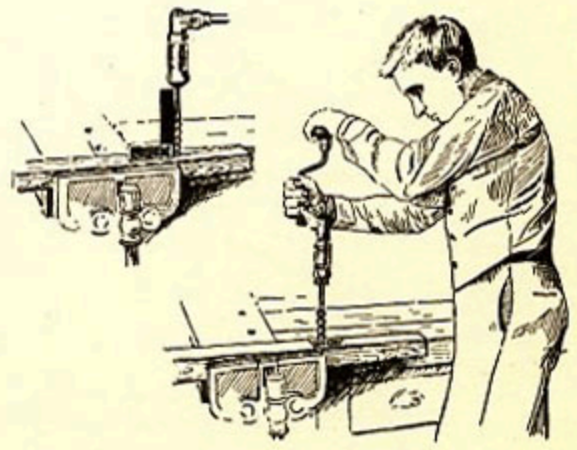


Chuck of Bit Brace No. 919.

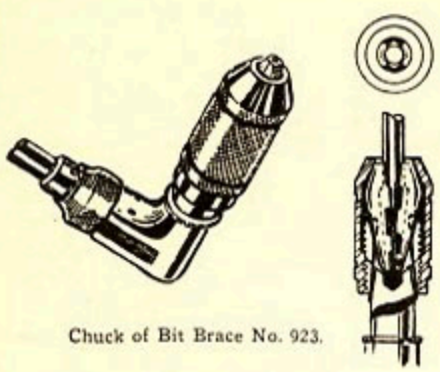
To place the bit in the chuck, grasp the chuck shell and turn the handle to the left until the jaws are wide open. Insert the bit shank in the square socket of the chuck and turn the handle to the right until the bit is held firmly in the jaws.



The illustration is of Stanley Bit Brace No. 919—8 in. Sweep.

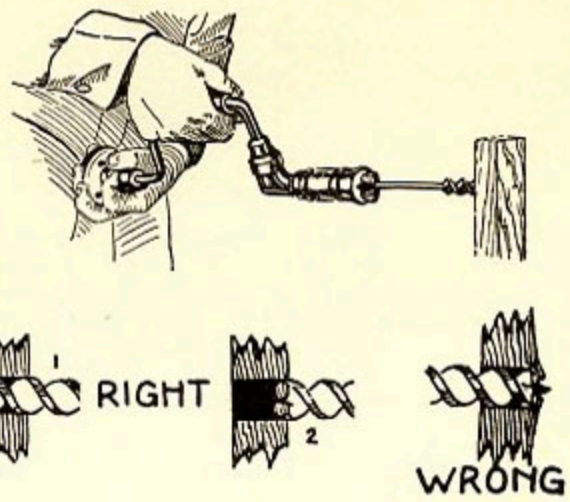


To bore a vertical hole, hold the brace and bit perpendicular to the surface of the work. Test by sight. Compare the direction of the bit to the nearest straight edge or to sides of the vise. A Try Square may be held against the bit.



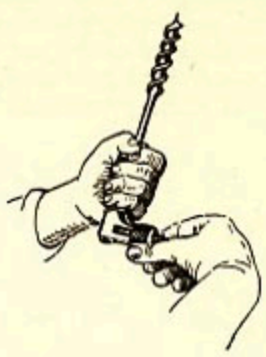
Chuck of Bit Brace No. 923.

Bit brace chucks of the above design are operated in like manner. The corners of the taper shank of the bit should be carefully seated in the V grooves of the jaws.



To bore a horizontal hole, hold the head of the brace cupped in the left hand, with the back of the hand against the stomach and with the thumb and forefinger around the quill. This gives perfect control of the brace.

To bore thru without splintering the Second Face, stop when the screw point is thru and finish from the Second Face.



To operate the ratchet turn the cam ring. Turning the cam ring to the right will allow the bit to turn right and give a ratchet action when the handle is turned left. Turn the cam ring left to reverse the action.

The Ratchet Brace is indispensable when boring a hole in a corner, or where some object prevents making a full turn with the handle.

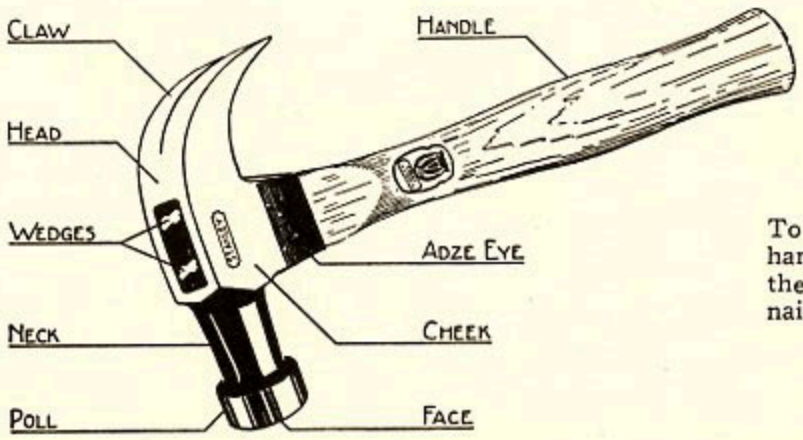
How To Select and Use Boring Tools.

How To Use Cold Chisels.

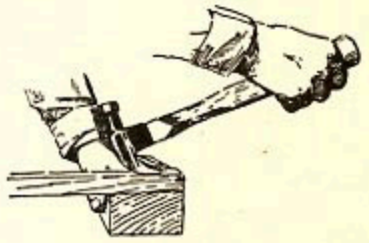
How To Use Setting and Riveting Hammers.

HOW TO USE
THE STANLEY NAIL HAMMER

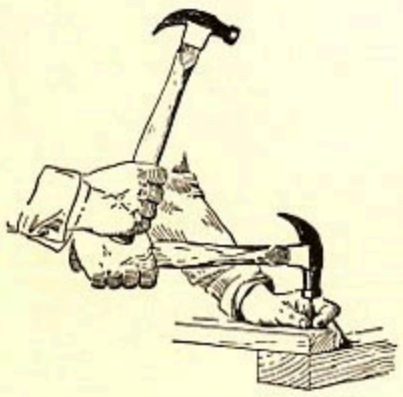
Grasp the hammer handle firmly near the end.



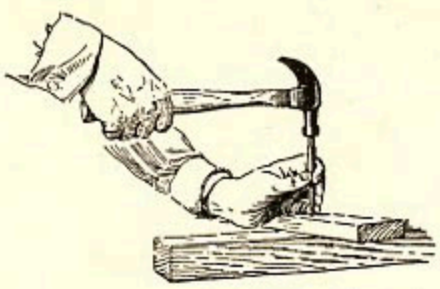
The illustration is of Hammer No. 52½, Bell Face, 10 oz. The weight is of the head only.



To draw a nail: Slip the claw of the hammer under the nail head; pull until the handle is nearly vertical and the nail partly drawn.

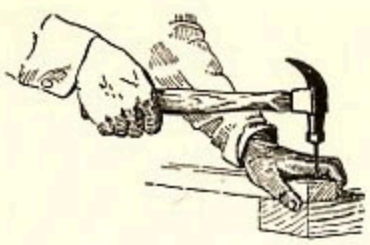


The blow is delivered through the wrist, the elbow and the shoulder, one or all being brought into play, according to the strength of the blow to be struck. Rest the face of the hammer on the nail, draw the hammer back and give a light tap to start the nail and to determine the aim.

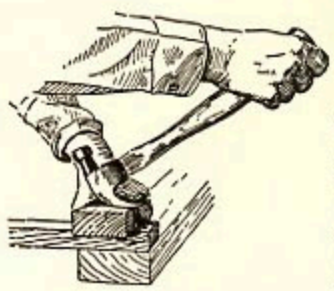


Use a nail set to drive nails below the surface of all fine work. To prevent the nail set slipping off the head of the nail, rest the little finger on the work and press the nail set firmly against it. Set nails about 1/16″ below the surface of the wood.

If the pull is continued, unnecessary force is required that will bend the nail, mar the wood and perhaps break the hammer handle.



Strike the nail squarely to avoid marring the wood and bending the nail. Keep the face of the hammer clean to avoid slipping off the nail. If a nail bends, draw it and start a new one in a new place.



Slip a piece of wood under the head of the hammer to increase the leverage and to relieve the unnecessary strain on the handle.

Always strike with the face of the hammer. It is hardened for that purpose. Do not damage the face by striking steel harder than itself. Do not strike with the cheek as it is the weakest part.

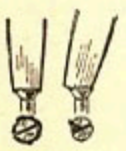
A bell face hammer is slightly more convex than a plain face hammer. With it a nail can be driven flush, or slightly below the surface of the work without leaving hammer marks in the wood.

HOW TO USE
THE STANLEY SCREW DRIVER
AND INFORMATION FOR DRIVING SCREWS

Select a screw driver of length and tip fitted to the work.

Screw drivers are specified by the length of the blade.

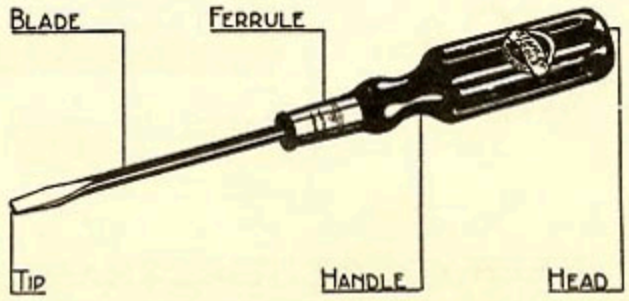
The tip should be straight and nearly parallel sided. It should also fit the screw slot and be not wider than the screw head.



If the tip is too wide it will scar the wood around the screw head.

If the screw driver is not held in line with the screw it will slip out of the slot and mar both the screw and the work.

If the tip is rounded or beveled it will raise out of the slot, spoiling the screw head. Regrind or file the tip to make it as shown above.



The illustration is of
Screw Driver No. 20—4 in. Blade.

Use the longest screw driver convenient for the work. More power can be applied to a long screw driver than to a short one, with less danger of its slipping out of the slot.

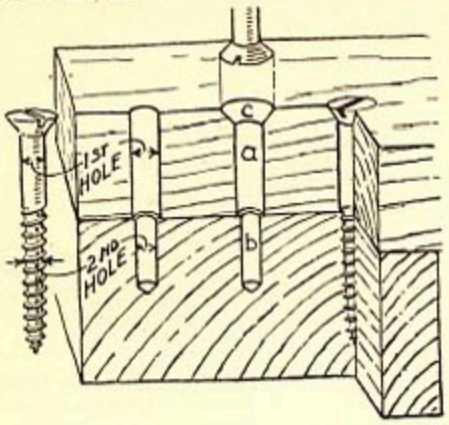
Hold the handle firmly in the palm of the right hand with the thumb and forefinger grasping the handle near the ferrule. With the left hand steady the tip and keep it pressed into the slot while renewing the grip on the handle for a new turn.

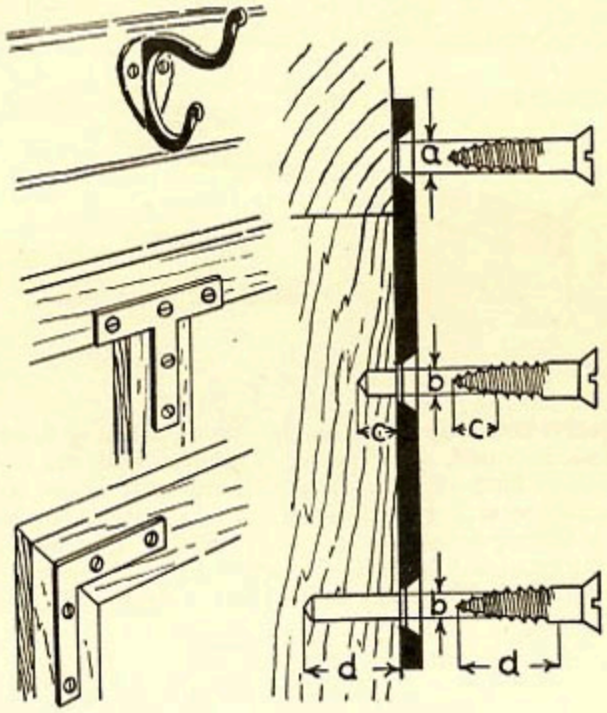
If no hole is bored for the threaded part of the screw the wood is often split or the screw is twisted off. If a screw turns too hard, back it out and enlarge the hole.

A little soap on the threads of the screw makes it easier to drive.

To Fasten Two Pieces of Wood Together With Screws:

1. Locate the positions of the screw holes.
2. Bore the first holes in the first piece of wood very slightly larger than the diameter of the screw shank, as at "a".
3. Bore the second holes slightly smaller than the threaded part of the screws, as at "b". Bore as deep as half the length of the threaded part.
4. Countersink the first holes to match the diameter of the heads of the screws, as at "c".
5. Drive the screws tightly in place with the screw driver.





To Fasten Hinges or Other Hardware in Place With Screws:

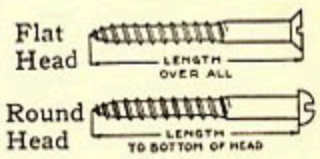
1. Locate the position of the piece of hardware on the work.
2. Recess the work to receive the hardware, if it is necessary.
3. Locate the positions of the screws.
4. Select screws that will easily pass thru the holes in the hardware, as at "a".
5. Bore the pilot holes (second hole) slightly smaller than the diameter of the threaded part of the screw, as at "b".
6. Drive the screws tightly in place.

If the wood is soft, bore as deep as half the length of the threaded part of the screw, as at "c". If the wood is hard (oak), the screw soft (brass), or if the screw is large, the hole must be nearly as deep as the screw, as at "d". Holes for small screws are usually made with brad awls or machine drills. For larger screws, bore the holes with the bits specified for the second holes, in the table.

SIZES OF WOOD BITS TO BORE HOLES FOR WOOD SCREWS

Number of Screw		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	22	24	26	28	30
Decimal Diameter of Screw		.0578	.0710	.0843	.0973	.1105	.1236	.1568	.1500	.1631	.1763	.1894	.2026	.2158	.2289	.2421	.2553	.2684	.2816	.2947	.3210	.3478	.3737	.4000	.4263	.4526
Fractional Diameter (nearest)		1/16 −	3/64 −	3/64 +	1/16 −	1/16 +	5/64 −	5/64 +	3/32 −	3/32 +	7/64 −	7/64 +	1/8 −	1/8 +	9/64 −	9/64 +	5/32 −	5/32 +	11/64 −	11/64 +	3/16 −	3/16 +	13/64 −	7/32 −	15/64 −	15/64 +	1/4 −	1/4 +
First Hole	Gimlet or Twist Bit 1/32	2	3	3	4	4	4	5	5	6	6	6	7	7	8	8	9	9	10	10	11	12	12	13	14	15
	Auger Bit 1/16								3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	7	7	8
Second Hole	Gimlet or Twist Bit 1/32			2	2	2	3	3	4	4	4	4	5	5	6	6	7	7	8	8	9	9	10	11	12	13
	Auger Bit 1/16														3	3	3	3	4	4	4	4	5	5	6	6

Exact sizes cannot be given for the holes for wood screws, as wood bits are graduated by 32nds and 16ths of an inch. Twist bits for wood and gimlet bits are marked by 1/32". Auger bits usually are marked by 1/16". Brad awls and machine drills are used to make holes for small screws.

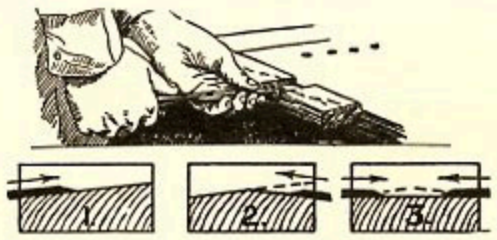


How To Select and Use Boring Tools.

How To Use Cold Chisels.

HOW TO USE
THE STANLEY CHISEL
HORIZONTAL CHISELING

To cut, horizontally, with the grain: The chisel is held slightly turned to one side and then pushed from the worker. It is held with the bevel down for a roughing cut and with the bevel up for a paring cut.



To cut, horizontally, across the grain with the work held in the vise; press the forefinger and thumb together on the chisel to act as a brake.

To avoid splintering the corners, cut halfway from each edge toward the center. Remove the center stock last.

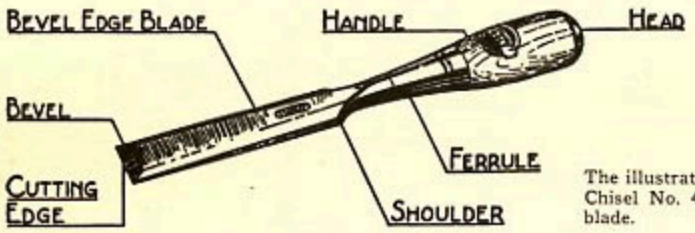
KEEP YOUR CHISEL SHARP

See Charts for Grinding and Whetting Plane Irons.

The Same Charts Apply to Chisels.

To cut a straight, slanting corner is the same as horizontal chiseling.

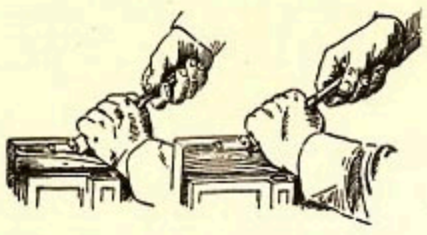
The work is held in the vise with the guide line horizontal.



The illustration is of Chisel No. 40—1 in. blade.

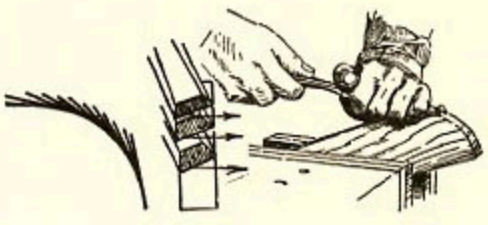
To cut across the grain with the work held against the bench hook, the heel of the left hand steadies the work while the fingers press the chisel firmly against the wood.

The chisel is controlled with the left hand, pressing firmly on the chisel and the wood. The power is applied with the right hand. The chisel is held slightly turned so the edge slides across the work or the chisel is moved to the right and left as it is advanced, to give a sliding action to the cutting edge. This is easier than a straight thrust and leaves a smoother surface on the work. AT ALL TIMES KEEP BOTH HANDS BACK OF THE CUTTING EDGE.

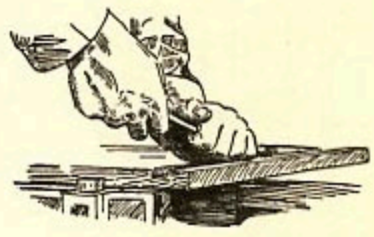


To cut a chamfer: Hold the chisel inclined to one side parallel to the slope of the chamfer and cut as in chiseling horizontally with the grain.

To cut a chamfer on end grain, the chisel is moved sideways across the corner of the work, held so that the chisel makes a sliding horizontal cut.



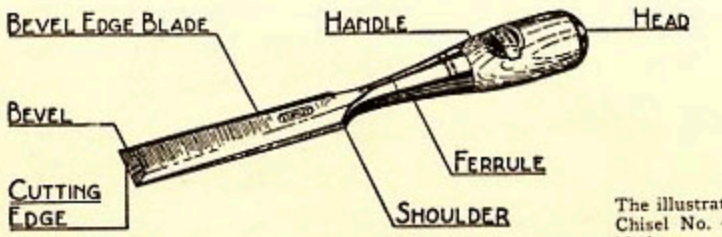
To cut a round corner, the chisel is moved sideways across the work making a series of cuts close together, each one tangent to the curve.



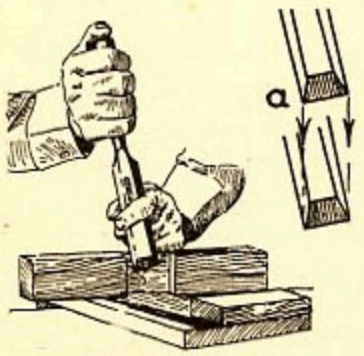
If the work is wide the chisel is held bevel down, so the handle will clear the work and the blade will not dig in too deep, as it is pushed forward.

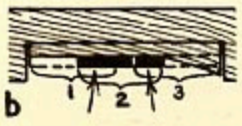
HOW TO USE
THE STANLEY CHISEL

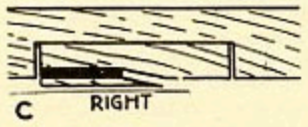
VERTICAL CHISELING

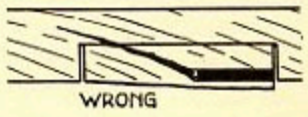


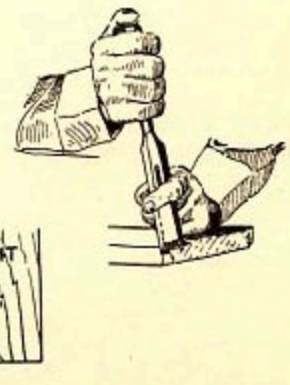
The illustration is of Chisel No. 40—1 in. blade.





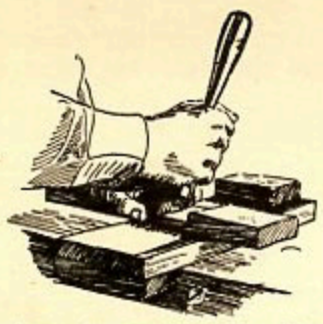




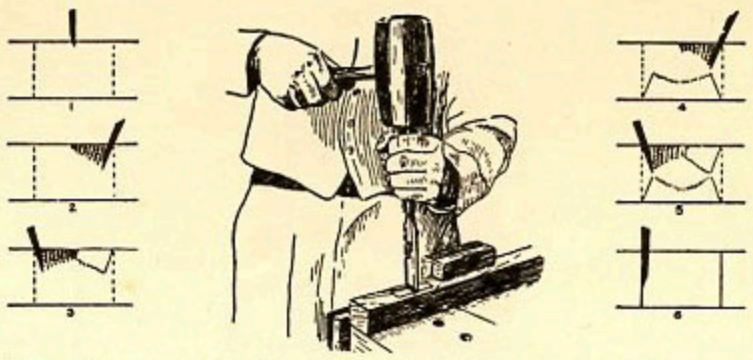


To cut, vertically, across the grain: (a) The chisel should be slightly tilted to one side to give a sliding action to the cutting edge, or it may be held straight and moved to one side as it is advanced. (b) If the surface is wider than the chisel, part of the chisel pressed against the portion just cut, helps to guide and keep in line the part of the chisel cutting a new portion of the surface. (c) Cut with the grain, so the waste wood will split away from the guide line.

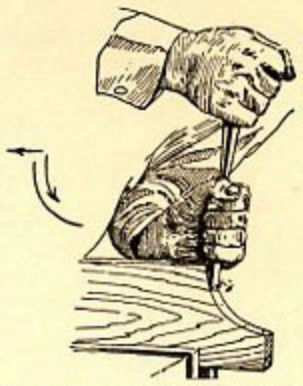
To cut, vertically, a slanting corner use the chisel in the same manner as in vertical cutting across the grain. Always work from the edge toward the end, so the wood will split away from the line. Working from the end toward the edge will split and ruin the work, as it is cutting against the grain.



To clean the corners of a Tenon, Notch, Dado or Rabbet: Grasp the chisel by the blade, near the edge; raise one corner of the cutting edge by tilting the handle away and draw the chisel toward you. The work is held by the left hand while the chisel edge and one corner, guided by the right hand, act like a knife.



The mallet may be safely used on the chisel when the cutting edge is across the grain. When the edge is with the grain, the use of the mallet is very likely to split the wood. The mallet may be used on the chisel to beat out a mortise, to cut the ends of a mortise (when the bulk of the material has been bored out), when the wood is hard and in roughing out (when there is a large amount of material to be removed).



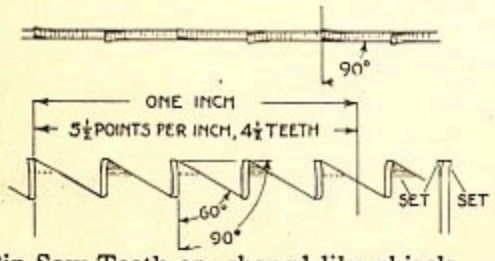
To cut a concave curved corner: Hold the bevel side of the chisel against the work with the left hand; with the right hand press down and draw back at the same time, giving a sweeping curved direction to the cut.

Always work with the grain from the edge toward the end.

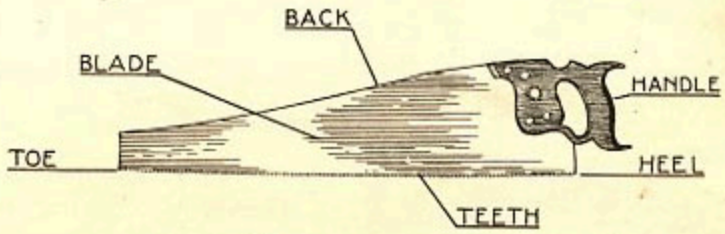
KEEP YOUR CHISEL SHARP

See Charts for Grinding and Whetting Plane Irons. The Same Charts Apply to Chisels.

HOW TO USE HAND SAWS



Rip Saw Teeth are shaped like chisels. They cut like a gang of chisels in a row.



The size of a saw is determined by the length of the blade in inches. Some popular sizes are 24" and 26".

The coarseness or fineness of a saw is determined by the number of points per inch.

A coarse saw is better for fast work and for green wood.

A fine saw is better for smooth, accurate cutting and for dry seasoned wood.

5½ and 6 points are in common use for rip saws.

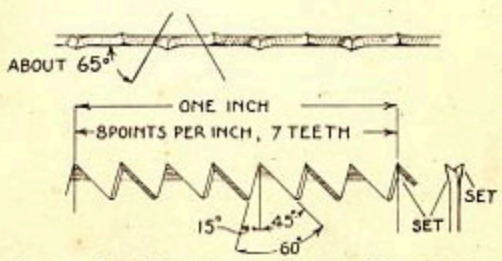
7 and 8 points are in common use for cross cut saws.

Saw Teeth are set, every other tooth is bent to the right and those between to the left, to make the kerf wider than the saw.

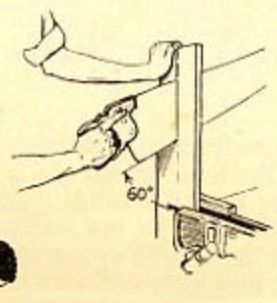
This prevents the saw from binding in the kerf or saw cut.

Quality saws in addition are taper ground, being thinner at the back than at the toothed edge.

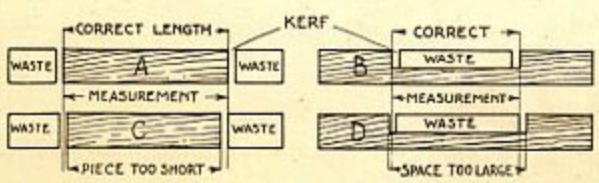
Keep saw teeth sharp and properly set.



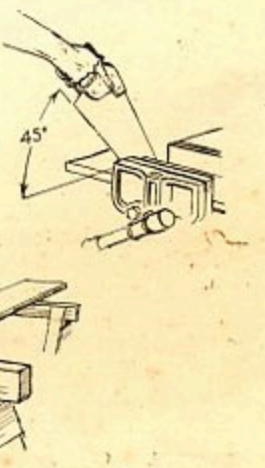
Cross Cut Teeth are like knife points. They cut like two rows of knife points and crumble out the wood between the cuts.



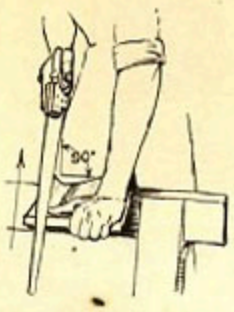
About 60° is the correct angle between the saw and the work for rip sawing.



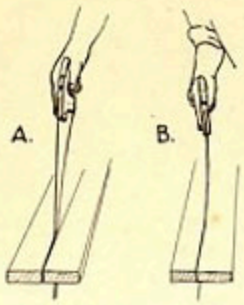
Be sure to saw carefully on the waste side of the line as at A and B. Sawing on the line or on the wrong side of the line makes the stock too short as at C or the opening too large as shown at D.



About 45° is the correct angle between the saw and the work for cross cut sawing.

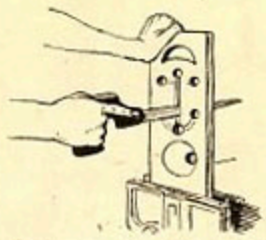


Start the saw cut by drawing the saw backward. Hold the blade square to the stock. Steady it at the line with the thumb.

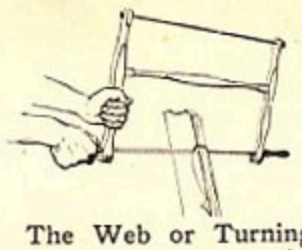


A. If the saw leaves the line, twist the handle slightly and draw it back to the line.

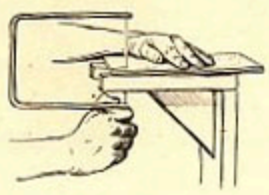
B. If the saw is not square to the stock, bend it a little and gradually straighten it. Be careful not to permanently bend or kink the blade.



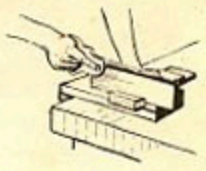
Compass or Keyhole Saws are used to cut curved or straight sided holes.



The Web or Turning Saw is used to cut irregularly curved shapes by hand.



The Coping Saw is used to cut irregular shapes and intricately curved patterns in thin wood.



The Back Saw is a thin cross-cut saw with fine teeth, stiffened by a thick back. A popular size is 12" with 14 pts. per inch. It is used for fine accurate work.

NOTE: SAWS ARE NOT MANUFACTURED BY STANLEY

How To Select and Use Hand Saws.

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The Stanley Works
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